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NAME OF AUTHOR/*NOM DE L'AUTEUR* HEATHER BLACK

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NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* DR. W. C. WONDERS

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DATED/*DATÉ* 9th April 1975 SIGNED/*SIGNÉ* Heather Black

PERMANENT ADDRESS/*RÉSIDENCE FIXE*
24 NORTHUMBERLAND AVENUE, GOSFORTH
NEWCASTLE UPON TYNE. NE3. 4XE.
ENGLAND.

NL-91 (8-74)

THE UNIVERSITY OF ALBERTA

AKLAVIK, NORTHWEST TERRITORIES: A GEOGRAPHICAL STUDY OF THE SETTLEMENT'S VIABILITY

by

© HEATHER BLACK

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF ARTS

DEPARTMENT OF GEOGRAPHY

EDMONTON, ALBERTA
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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled AKLAVIK, NORTHWEST TERRITORIES: A GEOGRAPHICAL STUDY OF THE SETTLEMENT'S VIABILITY submitted by HEATHER BLACK in partial fulfilment of the requirements for the degree of Master of Arts.

William C. Wonders
....
Supervisor

....

Charles W. Hobart
....

Date........2 April........, 1975

ABSTRACT

The settlement of Aklavik in the Mackenzie Delta of the Northwest Territories, is examined in both historical and contemporary perspective. The origin, growth and development of the settlement is followed from its establishment as a fur-trading post at the centre of the muskrat trade in 1912, to the 1930s and 1940s when it became the administrative capital of the Western Arctic. Growth of government functions during the 1950s necessitated an expansion in Aklavik which was hindered by the physical unsuitability of the site. The decision to move Aklavik and the criteria used to choose a site for the new town (later called Inuvik) are evaluated. The reasons for the refusal of many Aklavik residents to move are discussed.

Population migration between Aklavik and Inuvik is investigated in both the construction phase of Inuvik from 1955-61, and the administrative phase of the town from 1962-74. The volume and selectivity of migration, permanency of the move, and the factors influencing movement are examined. Migration to Inuvik during the construction phase was in response to employment possibilities, and was selective of white government workers and unskilled native residents in the younger age groups. In the administrative phase employment again dominated the motivational factors but migrants in the higher status occupational categories were selected. Return-migration to Aklavik was prompted by social factors and the availability of country food. Temporary movement between the two centres is frequent and chiefly motivated by social factors.

The transference of interest from the "land" to wage employment in an urban-based economy is found to have progressed from a "dual allegiance" to the land and settlement, to a greater allegiance to the settlement. The economic implications of this situation are appraised. The demographic structure and socio-economic situation in Aklavik in 1974 are examined. Aklavik is considered to be overpopulated in relation to the present level of employment and services in the community. An overwhelming dependence on government for wages, salaries and welfare payments, and on temporary unskilled employment is found to pervade. Temporary employment possibilities may increase considerably in the immediate future with expansion in the oil and gas industry, and the possibility of a Mackenzie Valley pipeline, but prosperity in Aklavik would be ephemeral.

Possible solutions to the unhealthy social and economic situation in Aklavik are discussed. Provision of permanent small scale employment and the revitalization of trapping, hunting and fishing on a part-time basis are recommended as possible solutions to the overpopulation in the community. In addition a measure of out-migration in response to permanent rather than temporary employment is deemed desirable. Improvement in the upkeep and replacement of certain municipal services and facilities is considered expedient, together with an expansion of family planning programs. It is suggested that only by careful planning will the undesirable social and economic consequences of high unemployment and reliance on welfare be reduced permanently, and not merely ameliorated temporarily by the availability of seasonal employment.

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CHAPTER I

INTRODUCTION

> There exists a real and demonstrable need for population studies in the Canadian North. . . . for scientific, administrative and governmental policy formulating. . . . basic to most other social behaviour is the variable of population, for it acts as a multiplier in all development equations. (Freeman, 1972, p. 56)

Development is the key word in the Canadian North at the present time. Oil and gas exploration and discovery are proceeding at a rapid pace in the Mackenzie Delta and the Arctic Islands. Debate continues on the Mackenzie Valley gas pipeline, and the completion of the Mackenzie Highway will most probably foster further growth. Development of the Canadian North is a top priority for the federal government. "Those who would like to see the North left as an untouched wilderness area or national museum peopled by natives and trappers, mounties and priests, are out of date" (Gemini North, 1974, p. 3).

A high correlation exists between population change and economic development. Demographic considerations are basic to almost all other social, economic and political spheres of development. In view of the high priority given to northern economic development in federal government planning policies, it is surprising that so little research has been done on population-related topics. A serious consequence of the scarcity of population research in the Canadian North is that economic development plans are being formulated without an adequate understanding or analysis of population characteristics, migration patterns and demographic trends. Also, since the population base is small any change in relative terms tends to be very large. The social and economic costs of mistakes in northern development policy are not only very great, but may be irreversible. The Canadian North is one region where the need is greatest and the time shortest to assist in rational development programs, and population research is vital in this respect.

THE STUDY AREA

The settlement of Aklavik, in the Mackenzie Delta of the Northwest Territories, was chosen as the focus of the research. Aklavik is located at latitude 68°13' North, and longitude 135°59' West, at the junction of the Enoch, Pokiak, and Peel Channels of the Mackenzie River. The settlement is approximately 110 miles north of the Arctic Circle, 50 miles south of Mackenzie Bay on the Beaufort Sea, and 1,070 miles northwest of Edmonton. The community extends for a mile and a quarter along the west bank of the Peel Channel (see Figure 1).

Since population movement and migration between Aklavik and Inuvik provide a major focus of the research, the study area includes Inuvik as the destination and source of migrants. Inuvik is located at latitude 68°22' North, and longitude 133°43' West, on the East Channel of the Mackenzie River, 60 miles south of Mackenzie Bay on the Beaufort Sea. Inuvik lies 35 air miles and 80 river miles east of Aklavik.

THE POPULATION

Diversity is the key feature of Aklavik's population--ethnic, religious, cultural, social and economic. Most of the population can be traced to Eskimo, Indian, or European ancestry, and almost all

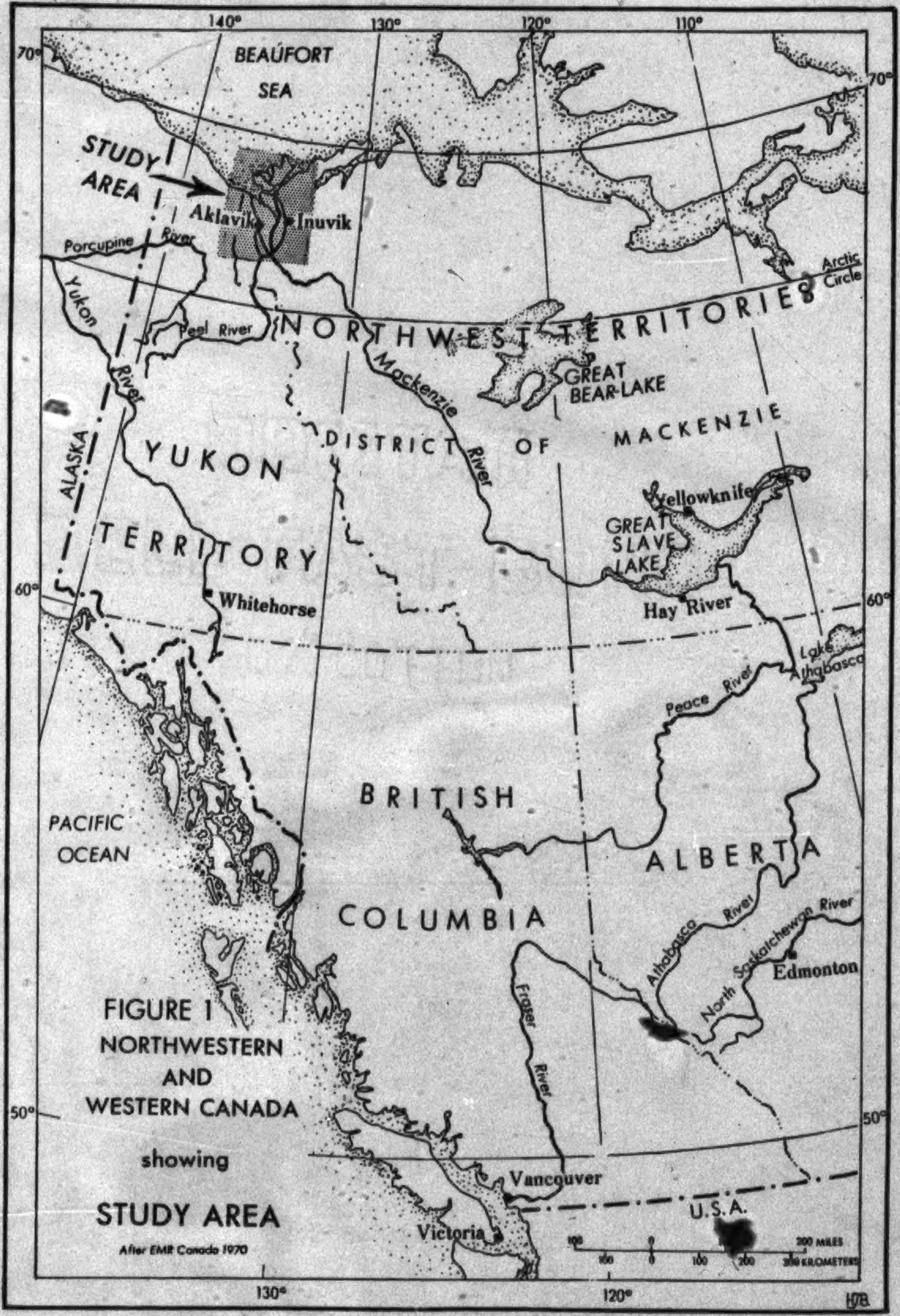
140°
130°
120°
110°
70°
70°
BEAUFORT SEA
STUDY AREA
Aklavik
Inuvik
Porcupine River
Arctic Circle
Yukon River
Peel River
NORTHWEST TERRITORIES
GREAT BEAR LAKE
Mackenzie River
DISTRICT OF MACKENZIE
ALASKA
YUKON TERRITORY
Yellowknife
GREAT SLAVE LAKE
Hay River
60°
60°
Whitehorse
Lake Athabasca
Peace River
BRITISH COLUMBIA
ALBERTA
PACIFIC OCEAN
Athabasca River
North Saskatchewan River
Edmonton
Fraser River
50°
50°
Vancouver
Victoria
U.S.A.
100 0 100 200 MILES
100 0 100 200 300 KILOMETERS
130°
120°
HJB

FIGURE 1
NORTHWESTERN
AND
WESTERN CANADA
showing
STUDY AREA

After EMR Canada 1970

residents are a mixture of these racial groups.[1] Historically the Indians in Aklavik belong to the group of Kutchin tribes, a branch of the Athapaskan linguistic stock. Most of the Indians have connections with the Peel River Kutchin, and with the Vanta Kutchin of the Old Crow region in the Yukon Territory. Present day Aklavik Indians are commonly known as Loucheux Indians. Considerable intermarriage has taken place between the Loucheux and Scottish and French fur traders, as well as with neighbouring Indian and Eskimo groups and there has emerged a group of Metis residents--whose parents are of differing ethnic origin.

The Eskimos of Aklavik belong predominantly to two groups: firstly, the original Mackenzie Eskimo, considerably reduced in number by disease introduced by the whalermen in the late nineteenth and early twentieth centuries, and secondly the Alaskan Eskimo, who migrated into the Delta area in three main waves--1896/7-1910; 1915-23; and 1946-49. A small group of Central Eskimos from the Amundsen Gulf to Coronation Gulf area are also present in Aklavik.

In addition there are two major categories of white residents in Aklavik, distinguished by the permanency of their stay in the settlement.[2] Permanent white residents have lived in the settlement since the height of the fur trade in the 1930s and 1940s. Others have migrated there in later years and many are married to native Aklavik females. Temporary white residents fill some of the educational, administrative, institutional and commercial functions in the settlement.

---

[1] For a fuller discussion of the criteria used to to distinguish between the various ethnic groups, see Chapter V.

[2] See p. 12 for a fuller discussion of "permanency."

THE PROBLEM

Aklavik was established in 1912 as a fur trading post, and during the 1930s and 1940s was the most important centre in Canada,north of the Arctic Circle, as the centre of the muskrat trade and the administrative capital of the Western Arctic.

During the 1950s expanding government functions and growing interest in Arctic development and the welfare of native peoples necessitated growth in Aklavik as an administrative centre. However, the problems of Aklavik's site handicapped further expansion and Inuvik was developed to replace it in 1955. The combination of silt and permafrost in Aklavik leads to severe construction problems due to the melting of the active layer in summer. Drainage conditions are poor owing to the flatness of the terrain (about 10 feet above summer river water level and 30 feet above mean sea level) and to the presence of permafrost about 2 to 3 feet beneath the surface. Subsurface drainage is impossible and stagnant pools of water form surrounded by thick mud as the permafrost melts in summer. Appropriately Aklavik became known as the "mudtropolis of the Arctic" (Robertson, 1956, p. 3).

An additional problem is the lack of space for new buildings and for a major airport. Aklavik is confined to its present site by a bend in the Mackenzie River, and by swamps and ponds. Further problems include those of sanitation arising from the settlement's inadequate sewage disposal facilities, the annual risk of flooding, the erosion of the upstream river bank, lack of suitable building materials for roads, and the absence of gravel for new construction. All these factors argued in favour of transferring government functions to a new site.

The original plan, adopted by the Advisory Committee on Northern Development and approved by the federal government in November 1954, was to transfer the population of Aklavik to Inuvik gradually over five years and eventually to "phase out" the Aklavik settlement. Aklavik's population did decline during the construction period from 1955-61, but not to the extent which was anticipated. Employment opportunities in Inuvik provided attractive migration forces, and the transfer of administrative, educational and commercial functions to the new town further reduced Aklavik's population. However, it is now twenty years since the decision was taken to build the "New Aklavik" and the "Old Aklavik" continues to exist, and even to expand and to thrive, despite original government policy. No serious long-term decline in total population has occurred although there has been a change in the age and ethnic composition of the community.

It was not until 1966 that the federal government officially changed its policy and decided that Aklavik was not going to sink into the mud of the Delta, and recognized that many Aklavik residents refused to move. In addition permanent migration of former Aklavik residents back to Aklavik has occurred in significant numbers.

Aklavik is most closely linked to Inuvik, and these links extend beyond mere kinship ties. Temporary and seasonal movement between the two settlements occurs frequently and permanent migration continues today in both directions. Daily scheduled and charter flights connect the two settlements in all seasons. In summer the Mackenzie River provides a transportation link by boat, and the same route provides an ice road for cars and "ski-doos" in winter.

There is now no question of Aklavik disappearing and considerable reinvestment has occurred in the community. A new school, nursing station, recreational facilities, and housing have been provided in Aklavik, and river erosion has been reduced to some extent by bank protection. No serious flooding has occurred in the past five years, but Aklavik is still faced with the original problems which led to the decision to transfer government functions to Inuvik. Aklavik achieved "Hamlet" status on January 1st, 1974, a formal recognition of its continued viability. Significantly, Aklavik's motto is: "Never Say Die."

PURPOSE OF RESEARCH

The purpose of the research was to examine the factors encouraging stability or expansion in Aklavik's population, despite original government policy encouraging migration to Inuvik. An additional and related purpose was to determine the extent and selectivity of population movement and migration between Aklavik and Inuvik, and the types of interrelationships which exist between the two settlements. Further objectives were to examine the socio-economic implications of the demographic trends and mobility in Aklavik, to evaluate present planning policies with respect to Aklavik, and to indicate possible future planning implications suggested by the population research.

To achieve these aims population characteristics and demographic trends in Aklavik were examined and the population migration between Aklavik and Inuvik was investigated. The "push-pull" factors influencing population movement between the two centres were evaluated. Factors considered to be important attractive or repellent forces influencing movement included economic factors, particularly the availability of employment, social factors, including family ties, government encouragement, availability of educational, recreational, and municipal facilities, accommodation, provision of medical services, and existence of transportation and communication links.

The selectivity of migration according to age and sex, ethnic origin, marital status, educational qualifications and occupation was also examined together with the permanency of the movement. In addition a knowledge and understanding of the migrants' attitudes to and perceptions of Aklavik and Inuvik in terms of the provision of recreational and social facilities, employment opportunities and community welfare were considered to be important aspects of the research.

HYPOTHESES

Several general hypotheses were developed prior to field work and these were later tested against the statistical data which were gathered during the summer. It was hypothesized that:

1. Permanent migration from Aklavik to Inuvik would be largely due to economic/employment factors and would initially consist chiefly of two categories of migrants: firstly, males of predominantly white ethnic origin with government jobs, who were transferred to Inuvik; and secondly, native males and females, predominantly in the twenty to forty years age range, who worked on the construction of Inuvik and in service jobs respectively. In the period following the construction period permanent migration would be highest amongst the younger age groups educated in Inuvik, and would be greater amongst single females than males.[3]

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[3] Between 1960-73 pupils continuing beyond Grade VIII had to attend school in Inuvik. In 1973-74, Grade IX was provided in Aklavik, but pupils continuing beyond this had to transfer to Inuvik.

2. Migration back to Aklavik from Inuvik would consist mainly of those workers employed in the initial construction phase of Inuvik who had no specific training and were formerly hunters and trappers, generally of native origin.
3. Temporary migration from Aklavik to Inuvik and vice versa would be mainly for social reasons or for medical care. Temporary movements would not be confined to any particular season due to the availability of river transport in summer and a winter road in winter, but were likely to be concentrated in the summer months. (Owing to the more pleasant climate, and ease of river transportation, etc.)
4. Seasonal migration would be chiefly from Aklavik to Inuvik in response to job opportunities and would affect males and females in the younger age groups who were unskilled.
5. Permanent residence in Aklavik with the least contact with Inuvik would be predominantly confined to the older residents of Aklavik--former hunters and trappers, mainly of Indian and Eskimo origin.
6. Aklavik's age structure would be unbalanced with above average numbers in the 0 to 19 years age range.
7. Aklavik will become increasingly Eskimo- and Indian-dominated in the future whilst Inuvik will become increasingly white-dominated.

THE APPROACH

The approach to the problem is a geographic one. The research is undertaken from the viewpoint of the population geographer, concerned with the "areal variations in the distribution, composition, migrations and growth of populations and the ways in which these relate to the nature of places" (Clarke, 1971, p. 1). In this respect it differs from that of a demographer whose primary concern is with demographic processes per se, including the mechanics of population change, the motivations and selectivity of migrants, and socio-economic impact of migrations. The approach in this research is concerned with these demographic processes, not in isolation, but as a tool to understand and explain the spatial distribution of the population (Wilson, 1968, p. 2).

The spatial and temporal aspects are the central foci of the research. The spatial aspect of the research focusses on the settlement of Aklavik, and the migration of people between Aklavik and Inuvik. The movement of people between these two centres points to spatial differences and the migration streams are seen as links between the settlements, the study of which is of fundamental importance to geographers. The distance and direction of the movement is therefore limited to an examination of mobility between Aklavik and Inuvik, which have developed a complex network of interrelationships as a result of their distinctive histories. No attempt is made to test any of the classic theories of migration with respect to the distance and direction of the movement. Distance and direction are fixed since migration to and from other places is relatively unimportant in the settlement and the vast majority of the movements take place between Aklavik and Inuvik. In this respect Ravenstein's "laws of migration" with reference to distance measured in physical terms, Stouffer's concept of intervening opportunities, and the gravity model are inapplicable due to the unique migration situation which has developed between Aklavik and Inuvik.

It would be interesting, especially in view of the considerations given to out-migration as a solution to the "overpopulation" in relation to resources and technology in the North (Jenness, 1964;

Wolforth, 1966), to follow the migration patterns of migrants beyond Inuvik. It would then be possible to discover whether Inuvik acts as a "half-way house" for migration to the South from outlying settlements. However, it was not within the scope of this research to do this.

The temporal aspect of population change and migration is also a vital focus of the research. The research is not only concerned with the causes and consequences of the spatial distribution of population, but with the dynamics of population change and movement. Population dynamics in the community of Aklavik are considered within the time framework from the beginning of the construction of Inuvik in 1955 to the present day. Within this time span changes in population size, due to changes in the rate of natural increase, and changes in population composition in terms of age, sex and ethnic origin are considered. Within this temporal framework attempts will be made to test several theories of the socio-economic selectivity of migration and the motivation of the migrants. (See Lee, 1966, in particular.) In addition demographic trends before 1955 will be examined briefly to determine how the population of Aklavik developed prior to the changes imposed by the establishment of Inuvik.

Population movements and migrations to and from Inuvik are examined in terms of the permanency of the move. In this context the typology of mobility with respect to time dimensions developed by Gould and Prothero (1972) was found to be very useful. Gould and Prothero distinguish between "migration" and "circulation" on the basis of the permanency of the move. A modification of their typology was used in this study. A distinction is made between the following types of "circulatory" movements in Aklavik: temporary movements (or "periodic circulation" after Gould and Prothero) involve no change of employment, are usually of short duration, and generally motivated by social factors; seasonal migrations (or "seasonal circulation") involve temporary movements confined to particular seasons and similarly involve no change of permanent residence but are usually in response to job opportunities. In the Aklavik context "daily circulation" between Aklavik and Inuvik is not important and "long term circulation," involving absences of over a year is considered to be permanent migration for the purposes of this research. Both of these movements are included in the category of "circulation" in Gould and Prothero's typology. Permanent migrations involve a permanent change of residence and may or may not be in response to economic factors.

Within this typology of mobility, the study of migration and movement of people between Aklavik and Inuvik is concerned only with permanent residents of Aklavik. A "permanent" resident, for the purposes of this research, is defined as one who has lived in the settlement for over one year. In Aklavik all the "temporary" residents, usually of white ethnic origin, who are essentially "transients" and who fill some of the educational, religious, governmental and commercial positions in the settlement, are excluded from analysis in the migration study. However, some former Aklavik residents who have not yet lived in Aklavik for one year since their return from Inuvik or elsewhere are included in the analysis. This is justified since their declared intentions are to remain in the settlement and there are considerable indications that they will do so in the foreseeable future.

DATA COLLECTION

A total of three months were spent in the Mackenzie Delta, with approximately two months in Aklavik, and one month in Inuvik. Techniques employed in the field research included examination of published and unpublished material in the two settlements and structured interviews. Reference was made to census data, medical records, school records, employment and unemployment data, social assistance records, the Aklavik Hamlet Council minutes, game management records, transportation records, Housing Association Surveys, and material supplied by the Aklavik Hamlet Council, the various government agencies, and commercial groups.

Demographic data were obtained from a variety of sources, and a combination of these sources was used to establish the most accurate picture of the size and structure of Aklavik's population during the summer of 1974. The Aklavik Hamlet Council has compiled a list of Aklavik residents giving birthplace, date of birth, ethnic origin, position in family, and occupation. A Manpower Survey computer print-out for Aklavik, accurate at 18th January 1973, was also used.[4] This computer print-out provided the following information for each Aklavik resident: household number, status within household, Treaty Indian band or Eskimo Disc number where appropriate,[5] social insurance number if applicable, sex, birthdate, ethnic origin, courses completed and permanent, seasonal and previous occupations.

The ethnic status of Aklavik residents was confirmed by reference to the Treaty Indian Band List and the Eskimo Disc List held by the

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[4] With the permission of D. G. Smith, Coordinator of the Graduate Program Committee, Department of Sociology and Anthropology, Carleton University.

[5] For a fuller discussion of the Indian Band List and Eskimo Disc List see Chapter V. Briefly, a record is kept of all Treaty Indians and Eskimos for administrative purposes.

Social Development Office in Aklavik. The July 1974 federal electors list for Aklavik provided a very up-to-date source of information about residents over the age of eighteen years, giving occupations in addition to names. As a final check on the 1974 population of Aklavik, a census was carried out with the aid of four Aklavik school children in August 1974, and cross-checked against the demographic data obtained from the other sources.

Interviews were conducted with various government personnel in each of the government departments in Inuvik and Aklavik. Information was also obtained through interviews with the Royal Canadian Mounted Police (R.C.M.P.), nurses, the adult education teacher, and the leaders of the various societies and organizations in the two settlements. Various council meetings were attended, and Hunters and Trappers' Association meetings in both communities, as well as special meetings held to discuss particular problems such as land claims or alcohol abuse.

A major part of the research relied on structured interviews in both Aklavik and Inuvik (see Appendices A and B). A formal questionnaire was not considered to be the best method of obtaining the demographic, social, economic, movement and migration information required, since the Mackenzie Delta area has been over-researched by this method in the past, and it seems probable that inaccurate information has been given by residents inundated by questionnaires. Instead a structured set of questions was formulated for each of the settlements.

In Inuvik people were selected for interview if they had ever lived in Aklavik. Migrants were identified by using a combination of methods. Firstly, three key individuals now living in Inuvik, who had lived in Aklavik for two years, eleven years, and fourteen years respectively, were asked to compile independent lists of migrants from Aklavik to Inuvik. These three individuals had held key positions in Aklavik at the beginning of the Inuvik construction period. One was the Pentecostal Minister, the second an active native Aklavik resident, and the third the Imperial Oil agent for Aklavik. Reference was made to the Inuvik telephone directory and the Inuvik 1974 federal electors list to facilitate identification of migrants. The Imperial Oil agent had lived in Aklavik from 1946-60, and continued in the same occupation in Inuvik from 1960-74. He is therefore well-acquainted with Inuvik residents. The Pentecostal minister retains this function in Inuvik, and the native Aklavik resident is still very much involved in community affairs. Both whites and natives were enumerated, but only those who had once lived in Aklavik permanently, and since remained in Inuvik. This excluded from analysis all of the government officials who were transferred to Inuvik from Aklavik.

In addition to obtaining lists of migrants from these three key people and compiling a joint list, each migrant interviewed was asked whether any additional migrants could be identified who did not appear on the list. The three lists which were originally compiled did not differ very much from one another, and therefore may be taken to be reasonably accurate. The final list amounted to 110 separate households which had migrated to Inuvik from Aklavik.

The addresses of these 110 households were obtained from various informants. Firstly the addresses of migrants living in rental housing were obtained from a Housing Association representative. Migrants living in their own houses on "Co-op' Hill" were located by one key resident who lives there (see Figure 9). The remainder of migrants from Aklavik who live in their own houses in Inuvik were located by a taxi driver.

Representatives of 96 of the 110 households were interviewed. The remaining 14 households appearing on the list were omitted because no representative could be contacted for interview, with the exception of one case where the person refused to answer the questions. Each house was visited three or four times at different periods of the day, but no one in the remaining 13 households could be contacted.

The interview itself (Appendix A) was conducted informally although with a structured set of questions. The questions were memorized and the same questions were asked to the inverviewee each time though not necessarily in the same form or order. This was considered essential in order to obtain the information required since the ethnic variety and linguistic diversity necessitated a flexible formulation of each question. Rarely was an attempt made to write down the answers to the questions in front of the interviewee since this tended to arouse suspicion and reduced the likelihood of obtaining information. However, immediately after leaving each house the answers were written down on the "questionnaire" form. The interviews took from ten minutes to three hours, depending on individual circumstances and the cooperation of the interviewee, with an average of about twenty minutes for each interview.

There are obvious limitations to this method which must be indicated. Firstly, the method relied on memory to a large extent, although this was not thought to be such a serious limitation as might appear on first consideration. Since the material was written down immediately after the interview was completed it is unlikely that too much was forgotten, and the interviewer had no difficulty in remembering the questions, which were straightforward. Equally important, perhaps, was the fact that the questions were not worded in the same way each time. Both limitations can be justified by reference to the unique situation which exists in Inuvik where the population is diverse in every way. A flexible approach was considered essential if the information required was to be successfully obtained.

An additional weakness was the fact that to some extent a subjective interpretation of responses to questions on the part of the interviewer may have distorted the reliability of the answers. In all cases attempts were made to retain the original wording of the interviewee on the questionnaire, particularly where opinions were asked on specific items. However, no doubt an element of subjectivity entered into both the formulation of the questions during the interview, and in the writing down of the answers.

A further weakness lies in the identification of migrants. No doubt the list of migrants compiled by the three key Inuvik residents and extended by questioning each interviewee, was not an exhaustive list of all migrants from Aklavik to Inuvik. However, other methods such as reference to voters' lists or Medical registers for different time periods were either impossible due to the inaccuracy of the records, or their non-availability, or were considered to be less useful than the method employed.

In Aklavik structured interviews were carried out on a house to house basis amongst permanent Aklavik residents. A representative of each household was interviewed (Appendix B) in the same manner as in Inuvik, although the interviews were longer, averaging thirty to forty-five minutes each, and frequently repeated visits were made to certain households where residents were particularly cooperative. One hundred and three interviews were conducted out of a total number of 130 'permanent' households. Eight of the 103 interviews were conducted with a resident of a household where an interview had already been held. Therefore 35 households were missed altogether. This was due to the fact that no member of the family could be contacted during the study period. The members of these families were out at fish camps on the Delta, down at the coast whaling or engaged in seasonal employment elsehwere for different periods in the summer. Included amongst these omissions were representatives of both the most stable element of the community and the most mobile. The most stable element consider Aklavik as their permanent home and engage in traditional resource harvesting activities on the Delta for various periods. The most mobile are engaged in seasonal wage employment outside the Aklavik area for various periods. One fish camp five miles down the West Channel from Aklavik was also included as a separate household since the residents' orientation is wholly towards Aklavik.

There are further limitations to the interviews conducted in Aklavik in addition to those mentioned for Inuvik. In most cases only one member of the household was interviewed, usually the head or the spouse, as in Inuvik. However, in cases of families with migrant members, the person interviewed was not always the migrant, and although questions were asked about the mobility of other family members, obviously the interviewees could not give first hand information as to the motivation behind the move. In some households two people were interviewed, either because two families lived under the same roof and had different migration patterns, or because two individuals in the household had very different migration histories and both were available for interview.

METHODS OF ANALYSIS

The demographic data for Aklavik were analyzed by a computer (IBM 360/67). For each resident information was fed into the computer as to household number, status within household, date of birth, sex, ethnic origin, permanent, seasonal and previous occupations, home ownership status, marital status, birthplace, courses completed, grade completed, number of years of schooling, place of education, number of children, and whether a questionnaire was completed or not. Simple frequency calculations were carried out, and cross tabulations made. The completed interview forms for Aklavik and Inuvik were also analyzed by the computer and similar calculations were made.

LITERATURE REVIEW

A detailed bibliography has been included at the end of this thesis and therefore only material which was directly related to the research project and which was found to be the most useful is included.

Mackay (1963) is the best source of information about the physical background of the Mackenzie Delta and Aklavik's site is described in detail. The historical background of Aklavik is dealt with very adequately in two of the Mackenzie Delta Research Papers by Wolforth (1965 and 1971). His reports collect together all the important information from other historical records which were used to follow Aklavik's growth and development, and are listed in the bibliography.

The reasons for the decision to establish Inuvik have also been well documented by Robertson (1955, 1956), Merrill (1960), Boek and

Boek (1960), and Honigmann and Honigmann (1970). Robertson (as Deputy Minister of Northern Affairs and National Resources), and Merrill (District Administrator, Fort Smith) deal strictly with the historical growth of Aklavik between 1912 and 1953, by which time it had become the major town of the Western Arctic as the "muskrat capital" of the North and the chief administrative centre. The reasons for the move of Aklavik are described in detail by both authors and the requirements of the new site are discussed. Each author then goes on to describe how the Inuvik site came to be chosen as the location of the "New Aklavik."

In an unpublished report, Boek and Boek (1960) approach the problem from a different perspective. These two anthropologists were commissioned by the Northern Coordination Research Centre in Ottawa to determine the reasons for resistance to the move on the part of Aklavik residents, as well as to make recommendations regarding both Aklavik and Inuvik. The decision to move is discussed from the point of view of local residents rather than from the viewpoint of government administrators and engineers. The Boeks' report offers a useful historical record of the situation in Aklavik and Inuvik in 1959. However the report is very subjective, little attempt is made at analysis of data which is presented at great length in tabular form, and the report is badly organized. These factors limit its usefulness.

Honigmann and Honigmann (1970) present a useful perspective on the development of Aklavik sixteen years after the decision was taken to build Inuvik. The focus of their study is on Inuvik but they discuss the reasons for the move of Aklavik at some length. Specific aspects of Aklavik's social and economic structure are dealt with in other reports. Smith (1968) examines the yearly cycle of economic activity for people living off the land, which provides a useful source of information relevant to Aklavik hunters and trappers. Clairmont's studies in 1962 and 1963 deal specifically with the problems of alcohol abuse and other deviant behaviour in Aklavik. In the later report other aspects of Aklavik's 1962 socio-economic structure are also dealt with, and this report is therefore useful as a baseline of information for that time.

Cooper (1967) deals with the technological aspects of the Mackenzie Delta and refers specifically to Aklavik, dealing with the problems of heat, light and electric power, and water supply and sewage disposal in the settlement. Heinke (1974) provides the most up-to-date published source of information about the municipal services in Aklavik and lists several recommendations for upgrading the system. More specifically a report on a Water Supply Study for Aklavik (1974) supplies information about the proposed changes in water supply.

Two reports appeared in 1967 which provide detailed information about Aklavik one year after the official federal government recognition of the future existence of Aklavik. The Aklavik Planning Report and Development Plan considers the physical, social and economic background to Aklavik and the contemporary situation with respect to social conditions, facilities and utilities. Bissett's report is less analytical and more descriptive. However, his statistical data are useful, particularly information concerning employment and income for the mid-1960s which are not included in the Aklavik Planning Report.

The most useful, detailed and up-to-date information about Aklavik is contained in Gemini North's Social and Economic Impact of the Proposed Arctic Gas Pipeline in Northern Canada, published in

May 1974. This seven volume report contains information about the current situation to the end of 1973 with respect to population, labour force, income, social problems, housing, health, employment and the traditional economy in the Mackenzie Delta. The primary purpose of the report is to assess the potential socio-economic impact of the proposed natural gas pipeline in the Mackenzie Delta. Each settlement is examined in turn, and the probable impact of developments is predicted in each case. This is a very valuable report, despite the fact that it is written for a particular purpose, since it provides an exhaustive study of the contemporary socio-economic situation and also predicts future changes which might occur due to developments in the region.

Despite the plethora of research reports on various aspects of the North which have relevance for Aklavik, there is a dearth of material on population. Some reports have been published dealing with population in the Northwest Territories generally, or the Mackenzie Delta specifically (see ~~particularly~~ Chang-Mei Lu and D. C. Emerson Mathurin, 1973). However, no case studies have been presented and no detailed migration analyses have been attempted. The concern of this research is to fill this gap in knowledge and to provide data on which to base future plans in Aklavik.

ORGANIZATION OF THESIS

Chapter II is concerned with the historical background of Aklavik up to 1955, particularly as this relates to the focus of the research. The physical, economic and demographic backgrounds of Aklavik are dealt with in this chapter, and the reasons for the establishment of Inuvik. Chapter III deals with population migration during the Inuvik construction period from 1955-61, and is concerned with the volume of movement, the selectivity of migration, the socio-economic motivations influencing migrants, and the permanency of the move. Chapter IV concentrates on movement and migration between the two settlements of Aklavik and Inuvik between 1962-74. As well as dealing with permanent and seasonal migration in response to economic factors, this chapter is also concerned with short-term movements between the two settlements in response to non-economic factors.

The demographic structure of Aklavik provides the central theme for Chapter V. Population characteristics including age and sex structure, education, occupation, marital status, family size, household size and structure, ethnic origin, birthplace, and natural increase are all considered in this chapter. Chapter VI reveals the economic and social situation in Aklavik at the present time and is concerned with the economic base of Aklavik, municipal services and recreational facilities, transportation and communication, housing, retail facilities, education, health facilities, and social welfare. The adequacy of the facilities and the availability of employment are related to the size and structure of the population. Conclusions are stated in Chapter VII, together with a discussion of future plans and prospects for Aklavik.

CHAPTER II

THE GEOGRAPHIC SETTING

"Aklavik's major development problem is the townsite itself. . . ."

(Gemini North, 1974)

PHYSICAL BACKGROUND

Aklavik is located on the left bank of the Peel Channel on a promontory of land around which the river makes a sharp turn to the northwest (see Figure 2). Three miles downstream from the settlement the river becomes known as the West Channel of the Mackenzie River. The Mackenzie Delta is the twelfth-largest river delta in the world, extending for 150 miles from Point Separation to the Beaufort Sea. Its maximum width is about fifty miles. The Richardson Mountains, rising to 2,500 feet ten miles west of Aklavik, form the western boundary to the delta, and the eastern boundary is formed by the Caribou Hills, rising to a 500 feet plateau. Approximately half of the delta is covered with water in the form of myriads of lakes and innumerable small channels (Mackay, 1963). The remainder of the delta area consists mainly of silt covered by muskeg. The level area of the delta is a maximum of ten to fifteen feet above normal river level and much of this area is flooded during spring break-up (Merrill, 1960).

The numerous lakes and channels provide an ideal habitat for fur-bearing species, particularly muskrat, (locally termed simply "rat") and for fish, both of which play an important part in the traditional

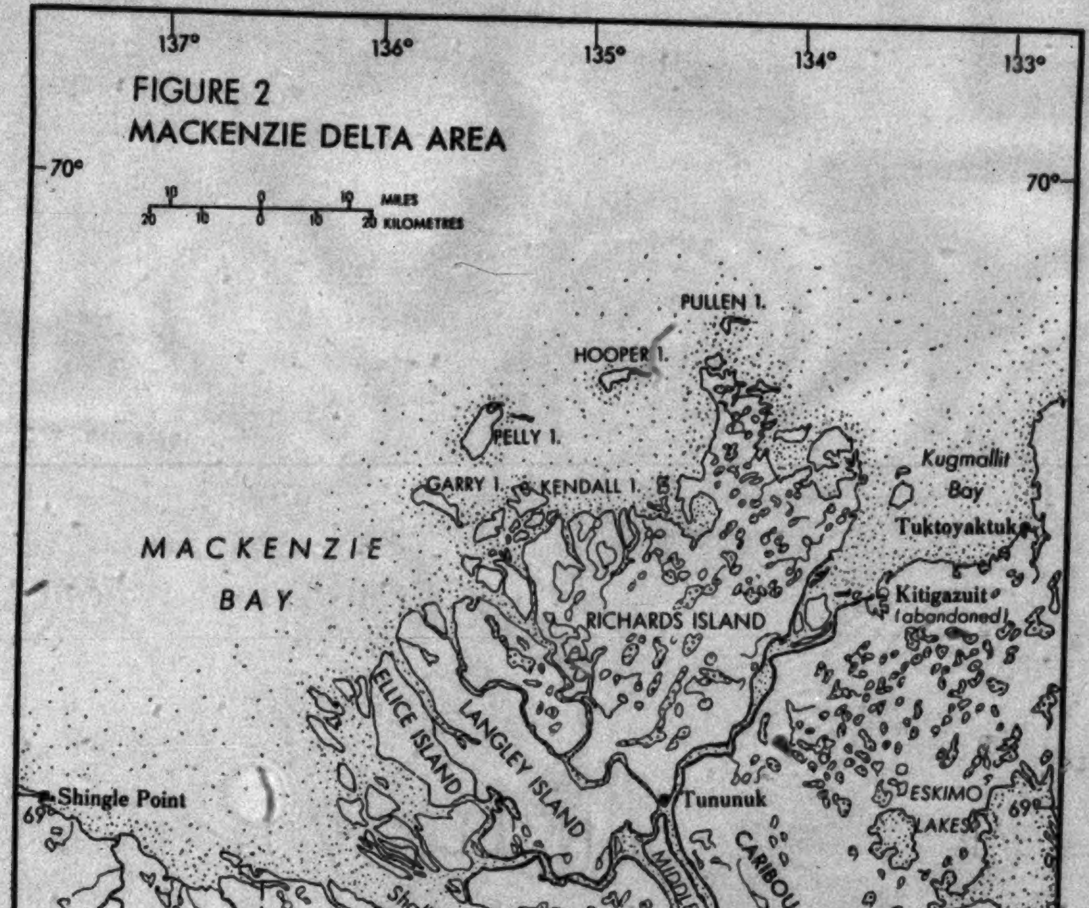

FIGURE 2
MACKENZIE DELTA AREA

137°
136°
135°
134°
133°
70°
70°
10 0 10 MILES
20 10 0 10 20 KILOMETRES
PULLEN I.
HOOPER I.
PELLY I.
GARRY I.
KENDALL I.
Kugmallit Bay
Tuktoyaktuk
MACKENZIE BAY
Kitigazuit (abandoned)
RICHARDS ISLAND
ELLICE ISLAND
LANGLEY ISLAND
Shingle Point
69°
Tununuk
ESKIMO LAKES
69°
CARIBOU HILLS
MIDDLE CHANNEL
Shallow Bay
Moose Channel
Reindeer Station
EAST CHANNEL
Napoiak Channel
RICHARDSON MOUNTAINS
WEST CHANNEL
Fish River
INUVIK
AKLAVIK
Aklavik Channel
YUKON TERRITORY
NORTHWEST TERRITORIES
Peel Channel
Husky Channel
68°
68°
After NTS 106 N.W.
NTS 107 S.W.
137°
136°
135°
134°
HJB.

economy. Most lakes in the Delta are shallow, and during winter have an average of two feet of ice and four feet of water. This total depth of about six feet is nearly optimum for muskrat. The muskrat population breeds in the lakes where there is an abundance of decaying organic material on the lake beds for food. At freeze-up in October the muskrat makes a hole in the ice and pushes decaying vegetable matter through the hole onto the ice surface. This "push-up," or feeding place is enlarged during the winter, and trappers set traps at these points in mid-April, before break-up. In May and June after the ice has begun to break up, muskrats are shot. Shooting reduces the quality of the fur, but greater numbers can be taken with less effort than trapping and shooting has therefore been used extensively in the last two decades.

Aklavik is built on a floodplain consisting of stratified fine sands and organic silts of considerable thickness. According to Makale et al (1967) these sands and silts are thirty-five feet thick and have a very high natural moisture content. Coarse pebbles are almost totally absent. Permafrost is continuous throughout the settlement at depths of one to three feet from the surface, extending down to 1,000 feet beneath the surface. Subsurface investigations in 1953 for the construction of a new school revealed that approximately 60 per cent of the frozen soil consisted of ice (Merrill, 1960, p. 53). The top "active layer" melts in summer and the combination of silt and water produces thick mud, especially after heavy rain. Subsurface drainage is impossible due to the presence of permafrost, and stagnant pools of water form on the surface. The settlement is only ten feet above summer river level and thirty feet above sea level and flooding is a frequent phenomenon during spring break-up (Makale et al, 1967, p. 1).

Two dominant factors influence the climate of Aklavik. Firstly, its high latitude (68°13'N.) and secondly the fact that the Arctic Ocean is a cold ocean (Cooper, 1967, p. 9). The sun's rays strike the earth at a small angle in high latitudes and the energy received is also small. This is compensated for to some extent by the increased length of day in summer. The cold Arctic Ocean has little moderating influence on temperature and Aklavik is characterized by long, cold winters and short, warm summers. Winter extends from late September to mid-May, and summer extends from mid-June to the end of August. Spring and fall are therefore relatively short seasons. The annual daily mean temperature is 15°F., the maximum mean is 22°F. and the minimum mean is 8°F. Extreme temperatures range from -62°F. in February to 93°F. in July (see Table 1). The annual number of degree days[1] is 18,017, compared with Toronto's 6,827, and Vancouver's 5,515 (Cooper, 1967, p. 9).

Winter mean monthly temperatures are below 32°F. for eight months, with December to February extremely cold (-17°F. to -20°F.). The other five winter months have average temperatures of -10°F. to 0°F. The length and coldness of the winter mean that the river channels are covered with ice for most of the year. Break-up usually occurs between May 28 and June 1, and freeze-up between October 9 and 12. Mean monthly temperatures rise above 40°F. only in June, July and August, and above 50°F. in July and August. Temperature ranges can be quite extreme from day to day, especially if a chinook occurs.

The annual total precipitation is low, averaging 7.7 inches per annum, 56 per cent of which falls as snow. Snowfall is approximately

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[1] There are as many degree days in a single calendar day as the number of degrees by which the day's mean temperature falls below 65°F. (Cooper, 1967, p. 6).

TABLE 1

CLIMATIC DATA FOR AKLAVIK

LATITUDE 68°13'N--LONGITUDE 135°59'W--ALTITUDE ABOVE M.S.L. 30 FEET

Month	AIR TEMPERATURE							Percentage Frequency of Days with Minimum Temperatures at or Below--				Mean Cloud Amount
	Mean Daily	Mean of Daily Maxi-mum	Mean of Daily Mini-mum	Mean of Monthly Maxi-mum	Mean of Monthly Mini-mum	Absolute Extreme Highest Re-corded	Absolute Extreme Lowest Re-corded	-10°F	-20°F	-30°F	-40°F	--
	°F	°F	°F	°F	°F	°F	°F					10ths of Sky Cover-ed
January	-21.7	-14.7	-28.6	15	-50	44	-59	91	73	51	27	5.2
February	-18.9	-11.7	-26.1	15	-48	49	-62	88	68	43	16	5.5
March	- 9.1	- 0.1	-18.0	24	-40	49	-56	75	49	20	2	5.0
April	9.2	18.7	- 3.0	47	-25	57	-44	28	10	2	0	5.6
May	30.0	37.8	22.1	58	2	77	-14	*	0	0	0	6.7
June	48.6	56.9	40.3	77	27	86	20	0	0	0	0	6.3
July	56.6	64.4	48.8	81	36	93	30	0	0	0	0	7.1
August	52.4	59.3	45.5	77	36	88	25	0	0	0	0	7.5
September	38.9	43.8	33.9	62	20	76	12	0	0	0	0	7.8
October	18.9	23.8	14.0	45	- 9	55	-22	4	0	0	0	7.7
November	- 4.4	1.5	-10.3	22	-30	44	-50	51	23	7	1	6.9
December	-17.7	-11.0	-24.4	14	-44	46	-54	88	66	32	11	6.2
YEAR	15.2	22.4	8.1	82	-54	93	-62					6.5
Period	1951-60					1926-60		1951-60				

*Average of less than 1 p.c. of less than 0.05 in.

TABLE 1 (continued)

Month	PRECIPITATION Rain Mean Amount	 Days	 Snow Mean Amount	 Days	 Total (water) Mean Amount	WIND Most Prevalent Direction	 Percentage	 Average Speed	Mean Days With-- Fog Visibility Less Than 5/8 Mile	 Blowing Snow-Visibility 6 Miles or Less	 Freezing & Thawing Degree-Days Below 32°F	 Above 32°F
	in.	No.	in.	No.	in.			m.p.h.				
January	0	0	4.3	9	0.43	S	29	6.0	2	3	1.603	0
February	0	0	2.8	8	0.28	S	23	5.6	2	3	1.468	0
March	0	0	4.1	9	0.41	NW	27	6.5	1	4	1.251	0
April	**	***	2.6	8	0.26	N	31	7.4	1	2	667	6
May	0.03	1	1.5	5	0.18	N	29	7.3	2	0	151	99
June	0.43	5	0.5	***	0.48	N	27	7.8	1	0	1	512
July	1.04	10	****	***	1.04	NW	26	7.0	1	0	0	784
August	1.10	11	0.1	***	1.11	NW	26	7.0	1	0	0	641
September	0.76	8	4.6	5	1.22	NW	30	7.0	2	0	24	250
October	0.01	***	11.3	14	1.14	NW	29	6.2	2	2	407	10
November	0	0	6.1	13	0.61	NW	30	5.2	2	3	1.076	0
December	0	0	5.1	12	0.51	NW	30	5.7	2	5	1.529	0
YEAR	3.37	35	43.0	83	7.67			6.6	19	22	8.175	2,302
Period					1951-60					1955-60	1950-59	

**Average of less than 0.005 in. ***Average of less than 0.5 day. ****Average of less than 0.05 in.

SOURCE: H. A. Thompson, Meteorological Branch, Department of Transport, The Climate of the Canadian Arctic, Toronto, 1967, p. 12.

43 inches with maximums in October and November (see Table 1). Every month except February and May receives at least 0.4 inches of precipitation, with the maximum occurring in the form of rainfall in July and August. The prevailing wind at Aklavik is from the northwest. The settlement is sheltered with windspeeds of only 6.0 miles per hour for January, 7.4 miles per hour for April, 7 miles per hour for July, and 6.2 miles per hour for October. The highest hourly windspeeds occur in April with an average windspeed of 39 miles per hour.

Aklavik lies in the subarctic, defined in terms of a tundra/forest dividing line (Mackay, 1964, p. 153), thirty miles south of the tree line in the boreal forest zone. However, inland from the tree-lined channel banks vegetation is chiefly of the muskeg and marsh type. Trees and brush have been cleared from the settlement itself with minor exceptions. A small stand of balsam poplar (Populus balsamifera) occurs in the Anglican church area about ten feet above river level, and a few spruce trees (Picea spp.) have been planted elsewhere in the community. The chief species in the area around Aklavik are white spruce (Picea glauca) on the higher ground at an elevation of about twenty feet above river level, with willows (Salix spp.) and alders (Alnus sp.) occupying the lower areas below ten feet above river level. Balsam poplar (Populus balsamifera) and some black spruce (Picea mariana) occupy the area to the south of Aklavik.

HISTORICAL BACKGROUND TO 1955

Origin of Aklavik, 1912-1919

> The settlements of the region still reflect the original reasons for their existence. (Cooper, 1967, p. 7)

In 1912 the Hudson's Bay Company established a post at Pokiak Point opposite the present site of Aklavik, and in 1915 the Northern Trading Company joined it. The establishment of these trading posts was in response to several factors. The period leading up to 1912 saw a shift in hunting patterns of both the Kutchin Indians and the Eskimo peoples towards the Mackenzie Delta itself. This was partly due to an increased interest in the fur trade in response to rising prices for all furs, and particularly to a growing interest in muskrat. In addition the decline in commercial whaling on the coast after 1905, and the decline of gold mining in the Yukon after the first decade of the twentieth century, focussed both native and white southern entrepreneurial attention on new areas. Muskrat prices did not rise as much as other furs, but large quantities could be taken at break-up with a relatively small expenditure of effort. "It was this consideration more than any other which made the Mackenzie Delta, the area in which muskrat are especially prolific, attractive to both the Kutchin and Eskimo people" (Wolforth, 1971, p. 43). The shift in trapping activity towards the Delta was paralleled by a corresponding shift in trading activity. Aklavik was established to secure for Canadian business interests an increased share of Eskimo trade which had previously been the monopoly of whaler-traders operating from San Francisco via the Bering Strait to the Arctic Coast. Aklavik's major importance arose from its central location in the Delta, and the significance this gave it as the principal trading post for muskrat.

It is significant that the trading posts themselves were not the basis for permanent settlement. The trading posts could easily satisfy the needs of the population by infrequent visits to the posts (Wolforth,

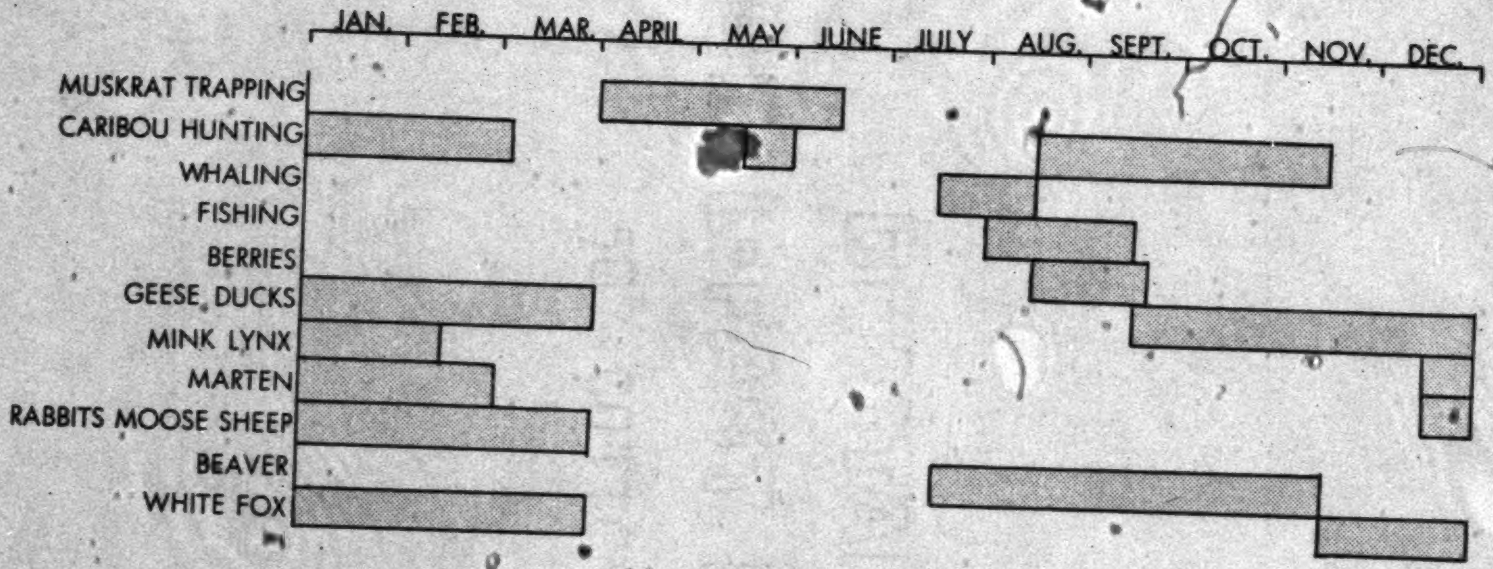

FIGURE 3

SEASONAL CYCLE OF TRADITIONAL RESOURCE
HARVESTING FOR FULL-TIME
HUNTERS AND TRAPPERS
IN THE MACKENZIE DELTA AREA
Source: Bissett, 1967

1965, p. 5). However, other institutions, including the missions, and later schools and hospitals, necessitated more frequent visits to the settlement and provided a more permanent basis for settlement. In 1919 an Anglican mission was established in Aklavik and was the first building on the west bank of the river, and it was around the mission that the settlement grew up, and not around the trading posts. In 1919 the Northern Trading Company, and in 1924 the Hudson's Bay Company were forced to relocate on the west bank to provide trading services to the growing settlement around the Anglican mission. The relocation of the trading posts was partly in response to difficulties experienced in docking river steamers at Pokiak Point, and partly due to a greater concentration of population on the west bank at the settlement which came to be known as Aklavik--an Eskimo word meaning "Place of the Brown Bear," or "Place of the Barren-Land Grizzly Bear."

1920-1929

The establishment of Aklavik in the heart of the muskrat breeding area in the Mackenzie Delta emphasized the economic importance of muskrat. Prior to the establishment of Aklavik marten, mink, fox and beaver had dominated the economy and muskrat fur was unimportant (Black, 1961, p. 63). Rapidly rising prices for muskrat from 1900 when muskrat pelts were of little value commercially, to $0.50 a pelt in 1914, and $1.31 a pelt between 1921 and 1929 brought an influx of trappers into the area. White trappers were attracted by the high prices and they introduced new techniques including steel traps and the .22 calibre rifle.

After the First World War several other trading posts were established at Aklavik, many of which lasted only a short period of time.

Both large and small trading companies were represented together with independent traders. H. Liebes and Company was said to be the first trading company at the present site of Aklavik, (Usher, 1971, p. 90), and was established in 1918. Lamson and Hubbard opened a trading post in 1920 and this was followed by many smaller independent traders during the 1920s. Nearly all these posts were short-lived, lasting an average of three years each while fur prices were high (see Table 2).

All of the trading posts were supplied by the Mackenzie system by transportation under the control of either the Hudson's Bay Company or the Northern Trading Company, with the exception of H. Liebes and Company, which was supplied by Captain T. Pedersen via the Bering Strait.

Aklavik became the scene of fierce competition between the trading companies during the 1920s and this, together with improvements in transportation facilities, encouraged prices to fall to the level of Herschel Island. Prior to this time lower prices could be maintained at Herschel Island due to cheaper transportation via the Bering Strait. Aklavik successfully captured both the Eskimo trade from the coast and some of the Peel River Kutchin trade as both groups were attracted to the Delta. Aklavik became the dominant trading post after 1925, especially for the muskrat trade, and overtook Fort McPherson.

During the 1920s many facilities were established in Aklavik and the settlement expanded rapidly. In 1922 the R.C.M.P. headquarters was transferred from Fort McPherson, construction began on the buildings for the Anglican mission, and the first post office in the Western Arctic was established. A survey party laid out the townsite in 1922, and in 1923 construction began on a hospital (Wolforth, 1971, p. 46). In 1925 a Royal Canadian Corps of Signals Station was established and

TABLE 2

TRADING COMPANIES AND INDEPENDENT TRADERS AT AKLAVIK, 1912 TO PRESENT

Trading Company or Independent Trader	Date of Establishment	Date of Closure
Hudson's Bay Company (Pokiak Point)	1912	1924
Northern Traders Limited (Pokiak Point)	1915	1919
Hudson's Bay Company (Aklavik)	1924	Present
Northern Traders Limited (Aklavik)	1919	1938
H. Liebes and Company	1918	1921
Lamson and Hubbard	1920	1924
Cunningham	1922?	1924?
Warner, H.	1922?	1924?
Day, William	1926	1930
Eckhard, A. W. P.	1927	1933
Miller, A. J.	1927	1929?
Hamdon and Alley	1929?	1932?
Kost, Mrs. V.	1930	1948
Parsons, J.	1932	1936
Peffer, H. E.	1932	1961
Douglas, W. W.	1937	1941?
Jones, James Lee, and Ross, W. W.	1938	1941
Douglas, John H.	1939	1947
Lang, Knud H.	1941	1964
Norris, Adolphus	1942	1958
Day, William	1942	1943
Shubin, Saul	1943	1945
Pines, Roy	1945	1950
Semmler, L. F.	1946	1956
Jones, James Lee	1947	1949?
Boxer, A. J.	1950	1953
Mackie, Stanley	1951	1952
Strong, William	1954	1956?
Lacombe, Ernest	1959	1966
Aklavik Fur Garment Cooperative	1964	Present
Mackie, Stanley	1966	Present

SOURCE: Usher, 1971, Fur Trade Posts of the Northwest Territories 1870-1970, NSRG 71-4, Northern Science Research Group, Department of Indian Affairs and Northern Development, Ottawa.

in 1926 a Roman Catholic mission. By 1926 the Anglican hospital was completed and the Roman Catholic mission built a hospital in 1927. Medicines were supplied by the government (Jenness, 1964, p. 45).

By the end of the decade transportation and communication links had improved considerably. The radio station was linked to a chain of radio stations down the Mackenzie Valley to the Delta, and in the Yukon Territory, which enabled fur prices in the Delta to be immediately responsive to fluctuations in prices in southern fur markets, and took much of the risk out of the fur trade. In 1929 Commercial Airways was awarded a contract to transport mail between Fort McMurray and Aklavik so that Aklavik received eight mail deliveries each winter instead of two by dog team (Zaslow, 1957, p. 210). Transportation along the Mackenzie River was also improved largely as a result of competition for freight between various companies. River transportation was under the control of either the Hudson's Bay Company or the Northern Trading Company until 1921 when the Alberta and Arctic Transportation Company joined them. This Company was purchased by the Hudson's Bay Company in 1924. Aklavik was the northern terminal of Mackenzie River steamboat lines originating in Fort McMurray, 1,600 miles from Aklavik. Steamer nagivation was broken by a sixteen mile portage passing the rapids between Fitzgerald and Fort Smith. From Fort Smith to Aklavik the distance is 1,300 miles, and the trip downstream took seven days in 1927, the return ten days. Until 1924 only two return-trips were made between Fort Smith and Aklavik each season, but after this date business increased to such a degree that three trips were scheduled (Toronto Star Weekly, February 19, 1927).

DEMOGRAPHIC CHANGES 1912-1929

> Aklavik's growth came not only through the regrouping of populations around a new settlement but also through long distance migration.
> (Honigmann, 1970, p. 31)

The early fur trade from 1840-1912 largely excluded the Mackenzie

Delta which was peripheral to both the Mackenzie Eskimos concentrated along the coast, and the Peel River Kutchin concentrated in the mountains between the Peel and Yukon Rivers. The Delta was used by both groups for summer fishing but considerable hostility existed between the two groups. During the whaling boom from 1902-12 the Eskimos were engaged in coastal activities, and the Klondike Gold Rush from 1898-99 attracted many Kutchin Indians to Dawson City.

The period from 1912-29 witnessed a shift in the activities of both groups towards the Mackenzie Delta due to three factors. Firstly, there was an increased interest in the fur trade initiated by high prices for furs. Secondly, the decline of commercial whaling following the collapse of the market for baleen and other whale by-products and the scarcity of game along the coast due to overhunting, focussed Eskimo attention on other areas. Thirdly, the decline of gold mining in the Yukon saw a reorientation of the Kutchin Indians back towards the Peel River.

Migration of Alaskan Eskimos to the Delta also occurred between 1915-23. White fox populations had declined on the Alaskan North Slope, and many Alaskan Eskimos were attracted by the developing fox trade in Canada. In addition many Alaskan inland and coastal Eskimos had gone to Herschel Island to engage in whaling activities during the whaling boom, and with the decline of whaling they moved into the Delta area. By 1929 the Delta area had become the focal point for the Kutchin Indians and for many Eskimos of Mackenzie and Alaskan origin. The coastal area and the mountainous area between the Peel and Yukon Rivers had become peripheral zones by 1929, whereas in 1912, at the time of the establishment of Aklavik, these were the focal points (see Figure 4).

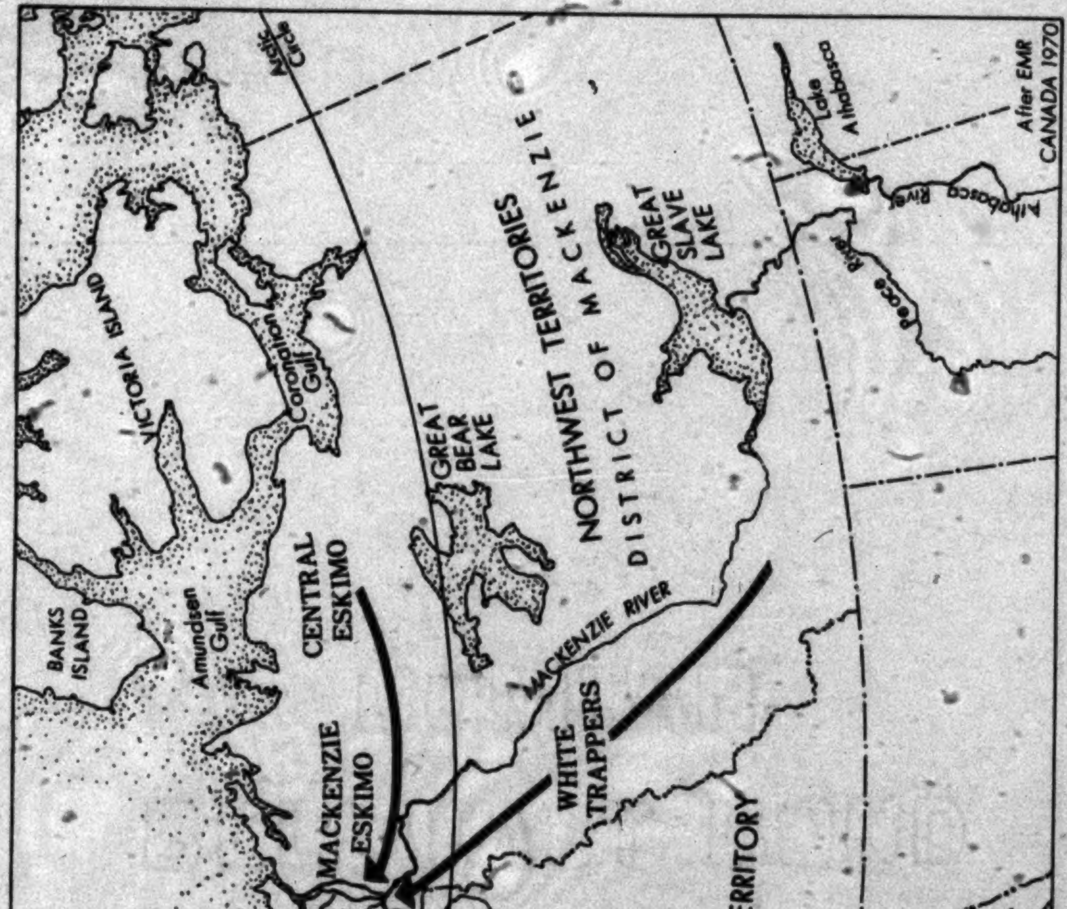
BEAUFORT SEA
Point Barrow
Colville River
ALASKAN ESKIMO
Demarcation Point
Shingle Point
Herschel Island
Aklavik
Porcupine River
YUKON
RIVER
ALASKA
U.S.A.
YUKON TERRITORY
KUTCHIN INDIAN
Peel River
MACKENZIE ESKIMO
CENTRAL ESKIMO
WHITE TRAPPERS
MACKENZIE RIVER
BANKS ISLAND
Amundsen Gulf
VICTORIA ISLAND
Coronation Gulf
Arctic Circle
GREAT BEAR LAKE
NORTHWEST TERRITORIES
DISTRICT OF MACKENZIE
GREAT SLAVE LAKE
Peace River
Athabasca River
Lake Athabasca
0 100 200 300 MILES
0 100 200 300 400 KILOMETRES

FIGURE 4
MIGRATION PATTERNS INTO THE MACKENZIE DELTA AREA, 1912-29

After EMR CANADA 1970

In addition to a convergence of Kutchin Indians and Alaskan and Mackenzie Eskimos on the Delta, white trappers from the South were attracted by high fur prices. Considerable intermarriage between all these groups took place during this time and a large group of Metis emerged in the area as a result of unions between different ethnic groups. Aklavik was a key factor in the convergence of Indians, Eskimos, whites and Metis since it provided a meeting place for all these ethnic groups. Located close to the tree line it was an ideal meeting ground for the traditionally forest-dwelling Indian and the tundra-dwelling and coastal Eskimo.

1930-1952

By 1930 Aklavik was established as the chief centre of the Western Arctic, initially due to its importance as a fur trading post, but later by virtue of the administrative functions and other institutions which were established in the settlement. Aklavik was the most important centre for economic, educational, religious and administrative functions extending from Banks Island to Fort McPherson and beyond (Honigmann, 1970, p. 30).

The depression of the early 1930s brought an abrupt fall in the value of pelts to a low of $0.31 (Black, 1961, p. 64). In the ten years between 1920 and 1930 prices of store goods had risen by at least 25 per cent (Jenness, 1964, p. 50), and this, combined with the cyclical nature of the fur-bearing animals and the low prices for fur, meant several years of relative hardship. However, Aklavik residents suffered less than residents in other areas of the North, due to the abundance of fish and game in the Delta.

The effect of the falling prices was to eliminate some of the smaller independent traders established during the 1920s and to concentrate trading activity amongst the larger companies in the settlement--the Hudson's Bay Company and the Northern Trading Company. In addition social activities became increasingly focussed in Aklavik rather than in traditional areas and some higher order central functions emerged in the settlement which acted as the regional administrative centre for the surrounding area.

The later 1930s represented the heyday of Aklavik as schooners visited the settlement from Banks Island after break-up and Mackenzie Delta Eskimos traded muskrat in the settlement in summer before leaving for domestic whaling camps at Shingle Point, Whitefish Station and Kitigazuit (Wolforth, 1971, p. 66). Though muskrat prices varied, they were usually sufficiently high to provide an adequate income which made the Delta attractive to Eskimos from Tuktoyaktuk and Indians from Peel River, all of whom contributed to the social and ethnic heterogeneity of the population.

After a decline in prices during the Depression, muskrat prices rose again to $1.00 in 1935 (Black, 1961, p. 64), and with the increased demand during and after the Second World War prices rose again to $1.10 in 1939, $2.00 in 1942, and a peak of $4.50 in 1945 (see Figure 5). Gambling and high liquor consumption were both very prevalent in the community during this period of relative prosperity. Increased contact with the South by steamboat and aircraft gave Aklavik even greater importance and this was emphasized by the establishment of more governmental and other institutions there during the 1930s. "Aklavik . . . became the most complex of the settlements during the period both in

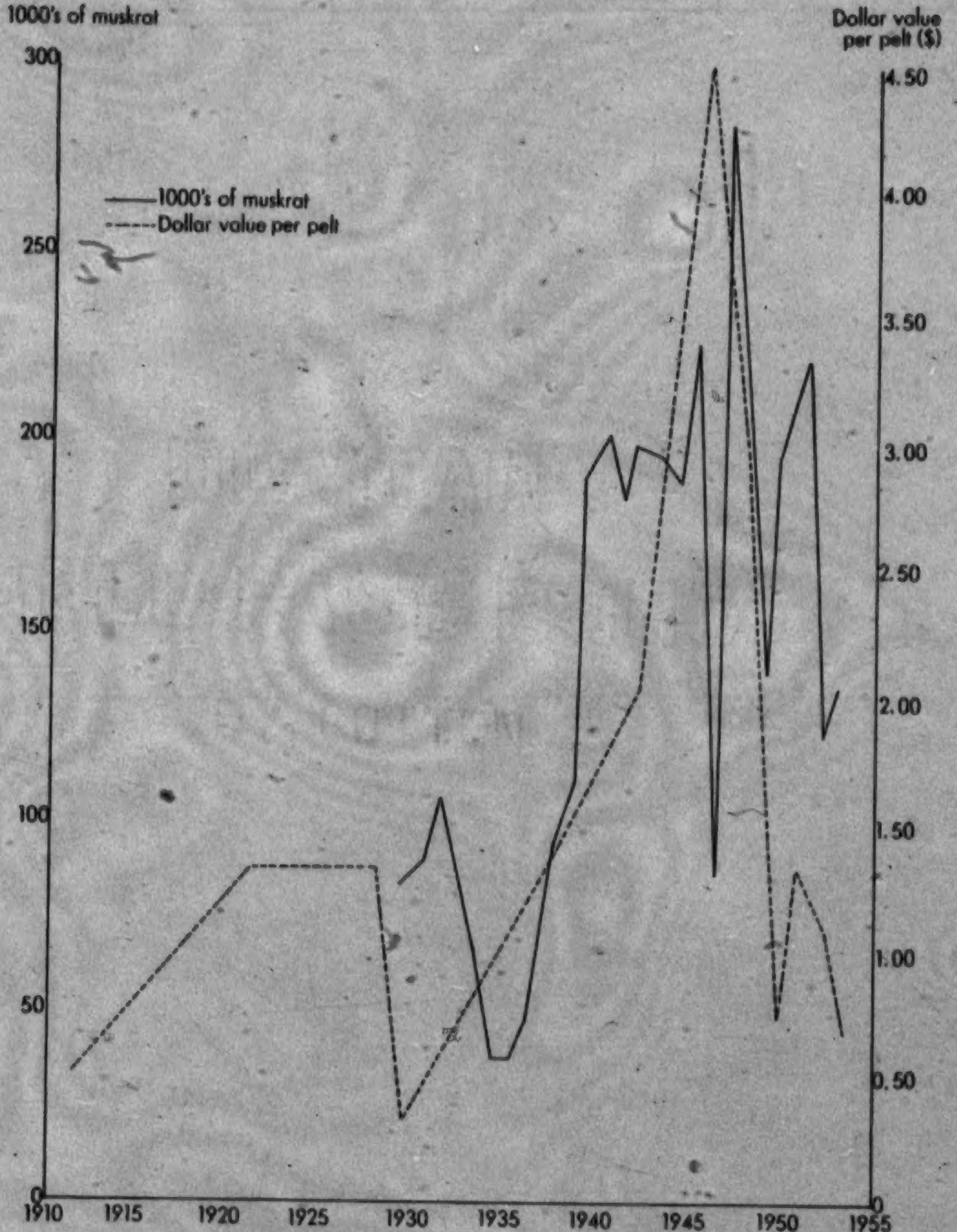

FIGURE 5

NUMBER AND VALUE OF MUSKRAT
TRADED INTO AKLAVIK 1910-53
Sources: Bissett, 1967; Black, 1961

its external relations, and its internal morphology" (Wolforth, 1971, p. 64).

A government-appointed medical officer moved to Aklavik in 1932, and he also acted as an administrator for the government (McEachern, 1967, p. 55). In the same year the Anglican Church employed a dentist who visited the settlement until 1956 (Honigmann, 1970, p. 40). A few years later in the mid-1930s Aklavik had a detachment of five R.C.M.P., as many as served Fort Smith (population 343) and the largest land detachment in the Northwest Territories (Bethune, 1937, pp. 12-48; Honigmann, 1970, pp. 30-31). Two mission boarding schools were opened in Aklavik about this time. A Roman Catholic school was opened in 1929, and the Anglican school was moved from Shingle Point in 1936 (Jenness, 1964, p. 48). Prior to this time pupils had been sent away to mission boarding schools, the Anglican boarding school being located in Hay River, and the Roman Catholic at Fort Providence. The establishment of residential schools in Aklavik tended to increase the permanency of the community. Parents were inclined to pay more frequent visits to Aklavik to see their children. However, only a very small percentage of children were attending school at all in the 1930s. Jenness (1964, p. 69) indicates that 93 per cent of the children in the Mackenzie River Basin were receiving no formal education whatsoever.

A new hospital was built in 1937, and an "Industrial Home" in 1938 for the "aged and infirm" (Jenness, 1964). Several new trading posts were established by southern white traders who moved into Aklavik in the period following the Depression in the early 1930s. White fox prices fell in the mid-1930s and several former coastal trappers concentrated their activities on muskrat harvesting around Aklavik. Prior to this time most of the buildings had been located between the Roman Catholic mission on the west bank of the Peel Channel and the Anglican mission around the point of land formed by the river bend. The settlement formed a crescent-shape following the bend in the river, with some infilling behind. In 1932, H. E. Peffer opened a store in the scrub vegetation to the west of the Roman Catholic mission and the settlement spread out in this direction as well as further infilling behind and between the two missions.

Permanent dwellings were erected in Aklavik during the late 1930s and 1940s and although these were by no means occupied by native people all the year, the fact that they were built indicated that visits to Aklavik were frequent enough for native people to consider it worthwhile erecting permanent homes there. A fairly marked segregation of native and non-native dwellings was apparent during the 1940s. A further segregation existed between Indian and Eskimo dwellings (Taylor, 1945, pp. 229-30; Wolforth, 1971, p. 67). Taylor describes over a dozen Indian shacks built in the north-west of the settlement. These contrasted with the religious houses and those occupied by Europeans, which were separated from the native homes. Most of the European homes consisted of one-storey frame houses, though there were a few two-storey homes, and some log cabins. The segregation of native from non-native dwellings was chiefly due to economic and occupational differences which led to social stratification in Aklavik. The segregation of Indian from Eskimo dwellings was partially ethnic, but also due to the government having reserved land for Treaty Indian residences (see Figure 6).

Some seasonal employment possibilities were available in the settlement due to the growing number of enterprises and institutions.

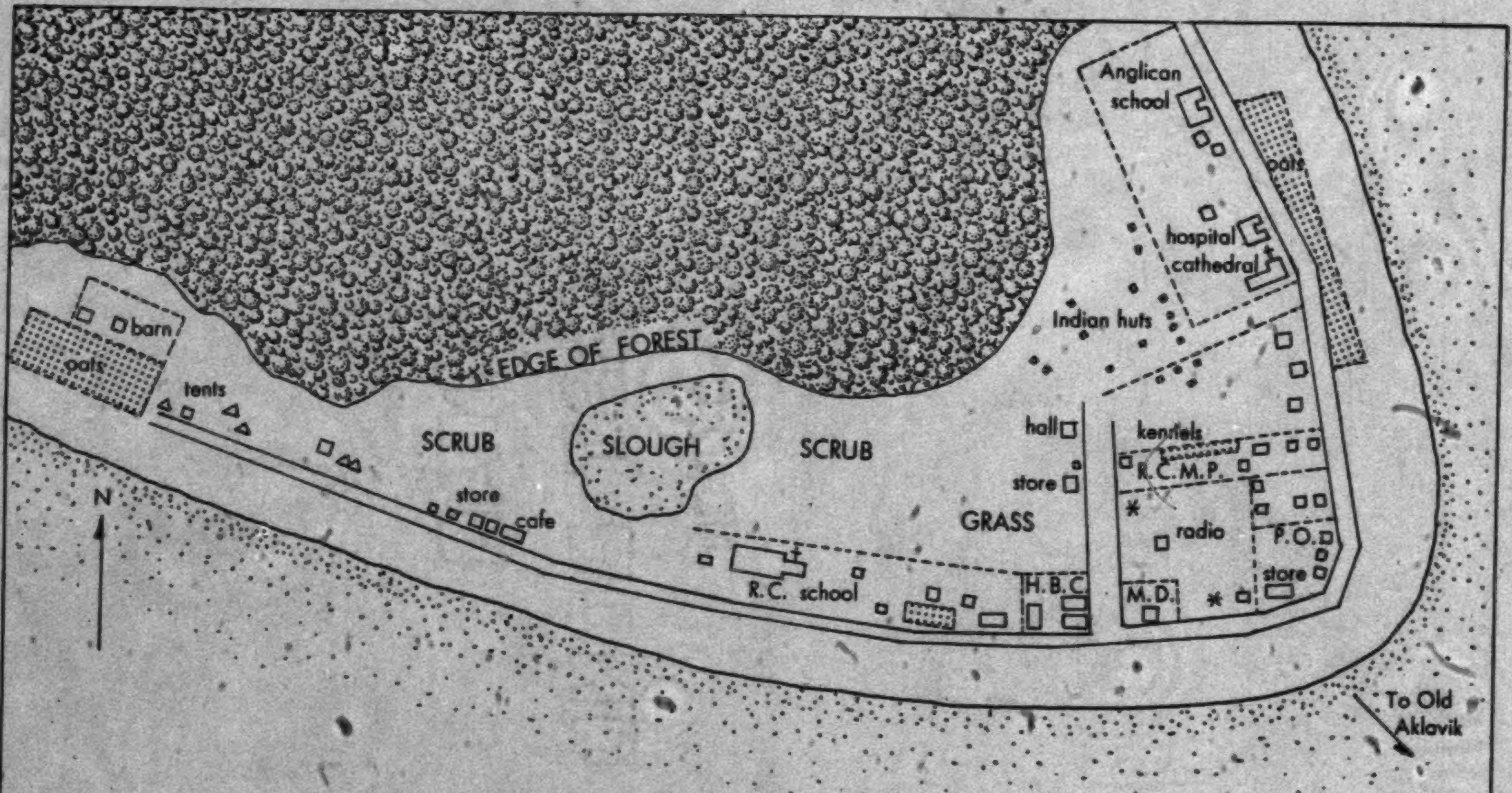
Anglican school
oats
hospital
cathedral
Indian huts
barn
oats
tents
EDGE OF FOREST
SCRUB
SLOUGH
SCRUB
hall
store
kennels
R.C.M.P.
radio
P.O.
store
GRASS
H.B.C.
M.D.
store
cafe
R.C. school
N
To Old Aklavik

FIGURE 6
PLAN OF AKLAVIK IN 1944

0 100 200
YARDS

Source: *Taylor 1945, p.228*

These jobs included construction, travelling with the R.C.M.P., hauling goods to outposts or from Herschel Island, cutting cordwood for missions and other organizations, and working for local merchants (Honigmann, 1970, p. 44). However, no groups of native people lived permanently in the settlement with the exception of children attending school there, the sick in hospitals and the aged and infirm in the Industrial Home. In the mid-1940s most local residents had their permanent homes in the "bush"[2] and were transients in town. Wage earners were marginal and most people were trappers. "The incentives to live in the settlement were as yet slight and government still pursued an active policy, especially in the administration of relief, of keeping indigenous people on the land" (Wolforth, 1971, p. 67).

However, the 1930s and 1940s brought many new incentives for the native people to visit the settlement. In addition to the existence of some seasonal employment possibilities, the availability of much-needed store goods, and the desire to visit schoolchildren, social events were also concentrated in the settlement. Most trappers returned to Aklavik to celebrate religious festivals, particularly Christmas and Easter, and they usually remained in the settlement until after New Year, when they returned to their winter camps (Honigmann, 1970, p. 48). At the close of the spring hunting and trapping season considerable movement into the settlement also occurred. Aklavik's population almost doubled during the summer months as trappers and hunters came in to trade their furs and to join in the celebrations marking the end of the muskrat season.

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[2] Local usage of the term "bush" is applied here. Native residents refer to the "bush" as anywhere outside the settlements where they engage in trapping, hunting and fishing, regardless of the vegetation in the area.

By 1947, muskrat prices had fallen again to $3.00 (Slobodin, 1962), whilst trade goods had risen in price during the inflationary period following the Second World War. The fall in muskrat prices was not as serious as the slump in white fox fur prices, but was considered serious enough for the government to introduce new measures. In 1948-49 registered trapping areas were blocked out varying in size from five to eighty-four square miles, with an average area of twenty-three square miles (Black, 1961, p. 65). The purpose of these areas was to protect trappers against a further influx of "outsiders" and to conserve the natural resource. The new trapping areas were adequate in size when fur prices were high but after 1952 fur prices declined even further and the trapping areas were found to be too small to provide an adequate income. By 1958-59 most of the trappers agreed to form a "group trapping area" open to anyone holding a trapping licence from Fort McPherson, Arctic Red River or Aklavik.

World War Two had focussed attention on the North and had led to increased concern in southern Canada for northerners' health, education and economic welfare. Family allowances were introduced in 1945, and in 1946 the Department of National Health and Welfare took over the responsibility for developing health services in the Arctic. Its budget was increased and health measures included an attempt to eradicate tuberculosis by immunization and to eliminate other diseases which afflicted the native population. Medical services and facilities were expanded in both the Anglican and Roman Catholic hospitals in Aklavik. In 1950 the Northern Administration and Lands Branch was created within the Department of Lands and Resources and this branch became responsible for the development of educational programs. A federal day school was opened in Aklavik in 1950. In 1953 the federal Department of Northern Affairs and National Resources was formed which aimed to improve the welfare of northern peoples through an accelerated expansion of services in the fields of health, welfare, education and economic development.

With this increase and improvement in health, welfare and educational facilities, Aklavik's population increased rapidly. However, the economic base of Aklavik continued to rest almost totally on the unstable muskrat trade. Prices fluctuated dramatically during the period 1930-53 in response to changes in fashion and the cyclical nature of the fur-bearing animals. The entire native community was dependent on trapping income, supplemented by social assistance, and the white community not directly engaged in trapping were indirectly dependent on it. In 1950 Cantley stated (p. 36) "Without muskrat there would be little or no trade, and without trade the community would be reduced to little more than a relief centre."

Fur prices fell after 1952 and trappers spent longer periods in the settlement, relying on welfare payments to carry them through times of hardship. Trappers turned to government administrators and private operators for employment in order to support themselves and their families. However, only a limited number of men and women could find jobs in Aklavik and most of the employment was short-term and seasonal in character. To provide for additional employment the government organized a program of cutting portages and dog-team trails through the bush. Plans to construct a new airport in Aklavik were abandoned in 1948.

In the mid-1950s a total of 224 buildings covered the town's 96 acres, and a few native families lived across the river at Pokiak

Point, crossing to Aklavik each day for work or school. In summer water was piped from Pump Lake behind the settlement and in winter ice from the river was melted to provide water (Honigmann, 1970, p. 56).

By 1953 five government departments were represented in Aklavik and together their establishments accounted for 36.5 per cent of the settlement's total fixed investment (Wolforth, 1971, p. 68). These included the Department of Northern Affairs and National Resources, Department of National Health and Welfare, Department of Transport, National Defence and the Royal Canadian Mounted Police. There were two residential religious schools, a federal day school, two hospitals, an old people's home, a post office, a Royal Canadian Navy Compound and a number of private commercial enterprises. As the centre of the muskrat trade, in terms of administration, education, health, transportation and population size, Aklavik was the most important centre in the Western Arctic in 1953.

DEMOGRAPHIC CHANGES, 1930-1952

By 1931 the population of Aklavik and the surrounding district was 411, comprising 180 Indians, 140 Eskimos, and 91 whites (Bethune, 1937, p. 48). At this time native peoples were definitely predominant in the settlement with approximately 44 per cent Indian, 35 per cent Eskimo and 21 per cent white. However, in comparison with other settlements in the region, Aklavik had a fairly sizeable minority of whites. Of the total Lower Mackenzie population in 1931, 48 per cent were recognized as Indian, 40 per cent Eskimo, and only 12 per cent white (*ibid*).

The influx of white trappers into the area continued until 1938, after which no new trapping licences were issued (Honigmann, 1970, p. 33). Convergence of native peoples on the Aklavik area also continued, particularly Eskimos, attracted by trapping incomes in the Delta. In 1941 the population had grown to 757 people, with 213 Indians, 377 Eskimos, and 167 whites (including Metis), plus native children from outlying communities who lived in the two residential schools run by the Anglican and Roman Catholic missions (Wherrett, 1945, p. 50; Cockney, 1966, p. 131). The percentage of Eskimos had increased substantially from 1931, to 49 per cent of the total population in 1941. The total number of Indians had also increased but their proportion of the total population declined to 28 per cent. The number of whites in the settlement almost doubled in the decade 1931-41, but the percentage remained approximately the same. In 1944 Taylor (p. 229) estimated that approximately fifty Indian and fifty Eskimo children lived for the greater part of the year in each of the two residential schools, returning home during the summer vacation. This meant that a total of two hundred schoolchildren also lived in Aklavik for most of the year.

Between 1946-49 another wave of migration of Alaskan Eskimos took place, in response to the earlier rise in fur prices. The migrants were chiefly Eskimos from the coastal zone between Point Barrow and Barter Island, and in addition a few Central Eskimos moved into the Delta area from as far away as Coronation Gulf. In 1949-50 the total population of Aklavik and the surrounding area had risen to 930 (Black, 1961, p. 64). Black indicates that there were a total of 216 trappers trading into Aklavik in 1949-50. Of these 46 originated in the Mackenzie Delta, 101 came from elsewhere in the Northwest Territories and the Yukon Territory, 36 from Alaska, and 33 from other areas. Black lists a dependent population of 714, giving an indication of the total dependence on trapping as a source of income.

By 1951 Aklavik and the surrounding coastal area from Richards Island to Pearce Point had a total population of 1,515, with 1,045 Eskimos, 210 Indians, and 260 whites and Metis (Bissett, 1967, pp. 61-62). Bissett estimates that approximately 600 of these were permanent Aklavik residents, and whites and Metis accounted for almost half this figure (Figure 7). With the increase in administrative, educational and medical staff, and the establishment of a navy detachment in Aklavik the transient white population had increased considerably, and although temporary residents of the North, they were permanent residents of Aklavik during their time in the North. The native population in the settlement, on the other hand, indicated considerable seasonal fluctuations, reaching a peak during the summer months when Aklavik's population doubled.

Federal government agencies employed between twenty-five to thirty officials, representing five federal government departments, and constituting a fifth of the total population with their families (Robertson, 1955, p. 5). In addition, by 1953, 400 school children were educated in Aklavik coming from the Delta area, the Arctic coast as far east as Spence Bay, and from as far south as Fort McPherson (*ibid.*).

1953-1954--THE DECISION TO RELOCATE AKLAVIK

By 1953 the expansion of government facilities and institutions in Aklavik and the accompanying rise in population had given rise to some problems. The site of Aklavik, though adequate for the trading posts of

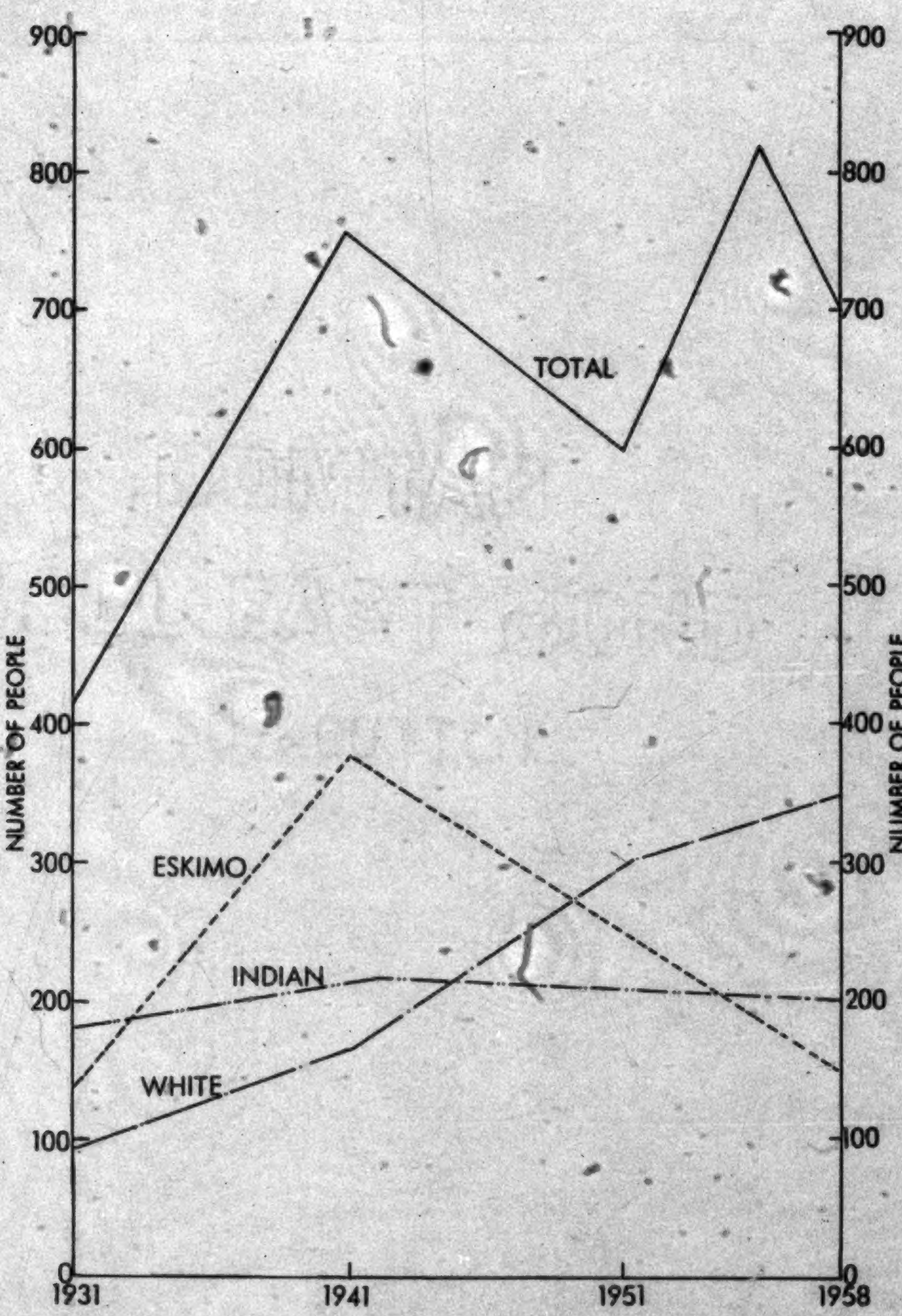

FIGURE 7

AKLAVIK POPULATION TRENDS
1931-58

For population data sources, see text

N.B. 1931, 1941 census figures refer toAklavik AND AREA the 1920s was completely inadequate for the expanding government functions. In October 1953 the Advisory Committee on Northern Development met to consider the problems of Aklavik's site. Foremost amongst these problems was the nature of the ground on which the town was built. As noted previously, Aklavik is underlain by a combination of silt and permafrost which presents severe construction problems. Future clearance of the insulating layer of vegetation, and construction of heated buildings would result in ground subsidence. The flatness of the terrain combined with the permafrost causes severe drainage problems. Flooding is a frequent occurrence at river break-up and in 1936 and 1949 there were serious floods which inundated the settlement.

The Advisory Committee also noted that the water and sewage supply was patently inadequate for an expanding population, and sanitation problems might arise from the settlement's inadequate sewage disposal facilities. These could only be brought into satisfactory condition by an estimated expenditure of $1,000,000 (Wolforth, 1971, p. 68). Due to the subsurface conditions the laying of sewers or water mains beneath the surface would cause more problems and to locate them above ground level "would be costly and unsatisfactory for the existing town conditions" (Merrill, 1960, p. 3).

Other problems indicated by the Advisory Committee included the erosion of the upstream river bank at a rate of five to seven feet each year, and the lack of space for expansion. The town was seen to be confined by the bend in the river and by swamps and ponds. Expansion was thought to be vital for Aklavik to fulfill its role as the centre of administration for northwest Canada. Lack of gravel for the construction of new roads and for a year-round airport were seen as additional problems. Aklavik was cut off from all other settlements twice each year during freeze-up and break-up and if the community was to serve the expanding needs of the North in the future, an all-year round airport was considered to be essential. In addition to the lack of gravel, topographic and subsurface conditions made the construction of an all-year round airport impracticable. Only with the expenditure of vast sums of money could a major airstrip be developed (Merrill, 1960, p. 53). A physician claimed that frequent mist and fog over Aklavik were responsible for the high rate of respiratory infections and tuberculosis amongst the residents (Honigmann, 1970, p. 58).

Some thought was given at this time to relocating Aklavik's total fixed investment of $3,000,000 to a more favourable site at an estimated cost of $1.3 million (Wolforth, 1971, p. 68). In January 1954 an Aklavik sub-committee of the Advisory Committee on Northern Development was set up, and recommended that relocation should be carried out in three phases. Firstly, earth work and concrete installations should be constructed at the new site, secondly, buildings worth salvaging from Aklavik should be moved to the new site, and thirdly, the federal government should assist Aklavik residents to move and make suitable arrangements for the transfer of land (loc. cit.).

At this stage Aklavik residents had not been consulted on the proposal, since initiative had come entirely from Ottawa, and news that the government planned to move the settlement had come initially over the Alaskan radio, in late 1953 (Jacot, 1954, p. 21). Decision to relocate Aklavik had already been taken at Cabinet level and approval was given to the relocation proposal on December 3rd, 1953. Opposition to the proposal in Aklavik "had neither time nor the institutional structures to express itself" (Wolforth, 1971, p. 69). A few days after the meeting on December 3rd a release was made to the press stating: "Aklavik is being moved for the good of its health. Sanitary conditions are unsatisfactory, water supply and sewage disposal are inadequate and are growing worse year by year" (loc. cit.)

Other reasons for the relocation were indicated by the Department of Northern Affairs. A depression in fur prices in preceding years had necessitated the rehabilitative training of many Aklavik residents and the provision of new employment was essential. The low incomes caused by falling fur prices in 1952 had been exacerbated by an influenza epidemic which had prevented many trappers from paying off their debts to traders. The total debt of the seven traders operating in the Aklavik area in 1952 was estimated to be $42,000 (loc. cit.).

In addition the requirements for the new site made explicit by the Department in January 1954, give a clear indication of the chief criteria leading to the decision to relocate Aklavik. The new site was to be "conducive to orderly, efficient and economical town planning" (Robertson, 1956, p. 7). The ground was to be suitable for permanent sewer and water systems, roads, and foundations, and there would have to be a good site for an airport. If possible the site should allow for adequate sewage disposal and gravel and sand should be available for building purposes. The site should be located where it could act as a transhipment point from river barges to sea-going vessels. In addition desirable factors for the new site included availability of wood, coal and water power. "Thus practically every criteria for good town development in that area was considered except for the way of life of its principal inhabitants" (Boek and Boek, 1960, Chapter III, p. 6)*.

A survey team was established and seven sites were considered between April and August of which site East Three, on the eastern edge of the Delta was considered to be the most suitable. In November 1954, the Federal Cabinet, upon the recommendation of the Minister of Northern Resources officially decided that the town of Aklavik should be moved to the new site. However East Three was in an area of relatively scarce natural resources, and "its selection showed either a disregard for or a conscious break with a hunting, trapping and fishing economy" (Wolforth, 1971, p. 71).

Much opposition to the move developed in Aklavik during the mid-1950s in the belief that the "Old Aklavik" would disappear and the "New Aklavik" was located far from good hunting and fishing areas. "If the decision about moving Aklavik from its present position had been put to a vote in Aklavik the outcome would have been quite clear: Inuvik would not have been built to replace it" (Boek and Boek, 1960, Chapter III, p. 6).* A relocation committee of Aklavik residents was formed after the government proposal was made clear and this committee favoured a change in plan to a site on a gentle slope of the Richardson Mountains leading down to the West Channel of the Mackenzie River. This met the criteria set up by the government except that its soil was shale rather than gravel, and an airstrip would have to be built some distance away to reduce the danger of planes flying into the mountains.

After the government had made the final decision for the new site an official flew into Aklavik to talk with local residents. However

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*Quoted by permission of A. J. Kerr, Chief, Northern Science Research Group.

"Aklavik residents are of the opinion that he had no interest in talking with their relocation committee and in exploring their recommendations. They feel he had his mind made up before he came there" (ibid., p. 7).*

Initially the "Old Aklavik" was expected to fade away, and relocation of existing buildings to the "New Aklavik," together with a relocation of population over five years was to be implemented. However, the relocation of existing buildings was later found to be impracticable due to the distance of East Three from Aklavik (85 river miles) and due to the spiralling costs of the project (Wolforth, 1971, p. 71). In addition a less rigid view was adopted by the administration to relocation of Aklavik residents in the mid-1950s. Official policy was that no one would be forced to move, but that residents without trapping areas or with inadequate sources of income would be able to find employment in the new town, initially on the construction, and later in government service, maintenance, and the operation of utilities, and in other activities which would develop (loc. cit.).

> From the earliest stages of discussion, it seems to have been generally recognized that Aklavik would continue to exist, even if in attenuated form, in face of attractions exerted by the new settlement . . . specifically it was maintained that the government was prepared to have a day school at Aklavik and to see a small community continue to exist there if there were people to whom it would be advantageous (loc. cit.).

However, it was assumed that the "New Aklavik" (later called Inuvik, an Eskimo word meaning 'place of man') would come to dominate the region and replace the "Old Aklavik" as the chief administrative and institutional centre for the Western Arctic. Increasingly it would absorb young people from a landbased economy into wage employment.

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*Quoted by permission of A. J. Kerr, Chief, Northern Science Research Group.

"With the careful town planning that is intended for the new settlement, the Aklavik of the future should be as attractive physically as the old Aklavik was disappointing" (Merrill, 1960, p. 57).

CHAPTER III

THE CONSTRUCTION PERIOD OF INUVIK--1955-1961

> Aklavik was expected to die a natural death. Indeed it seemed that this was going to be the case, since at first many people left the settlement to participate in the construction of Inuvik and very little government capital remained operative in Aklavik. However, after the initial construction phase at Inuvik many of the previous residents returned. The government seems to have recognized that Aklavik is there to stay. (Ervin, 1968, p. 2)

The period following the mid-1950s was one of great social and economic change in the Mackenzie Delta, initiated almost totally from outside the area. The requirements of defence and administration, respectively, led to the construction of the Distant Early Warning (DEW) line stations across the Arctic, and to the establishment of Inuvik in the Mackenzie Delta. The availability of wage employment came at a time when fur prices were declining and many native people abandoned their trap lines either temporarily or permanently to seek wage labour. This accelerated the processes of change which had emerged during the preceding period, leading to a greater permanency of residence in the settlement rather than on the land. There emerged a dichotomy between land-based and settlement-based activities and the concept of "dual allegiance" to land and town discussed by other authors (Honigmann, 1965; Smith, 1967; Ervin, 1968; Wolforth, 1971).

The processes leading to the establishment of Inuvik were fundamentally different from any previous settlement-forming processes in the area. All the other Mackenzie Delta settlements had been established to serve the fur trade, and whilst the organization of the settlements had been dominated by "southern" institutions, including the mission, the R.C.M.P., and the trading posts, functionally each settlement was orientated towards the native population and the traditional economy. In contrast the initiative for the establishment of Inuvik came totally from the South. From the beginning it was a planned settlement with all the facilities of a southern Canadian town, and with much stronger relations with the South than with the Mackenzie Delta which it served.

> What happened within this region had become, in fact, largely irrelevant to the activities carried on in the urban centre, and the land-based and urban economies operated as distinct and poorly integrated units. (Wolforth, 1971, p. 133)

The decline in fur prices in the early 1950s had accelerated the trend for people to move into Aklavik, and to establish permanent homes there (Figure 8). This trend had particularly affected the Indian population whilst the majority of Eskimos were "bush" dwellers in the mid-1950s. The construction of Inuvik resulted in both temporary and permanent migration of Aklavik residents to Inuvik. It also tended to divert the flow of some "bush" dwellers from Aklavik to Inuvik.

The initial construction phase of Inuvik, from 1955-58 affected the trapping economy only marginally. Most workers trapped until the middle of June, and worked on construction from then until early in September when they went back to the land to obtain a supply of fish for the trapping season. Wage employment in Inuvik provided little more than an additional source of income to supplement the declining amount of money received from fur trapping. Many trappers used the extra income to purchase new trapping equipment or to repair old equipment.

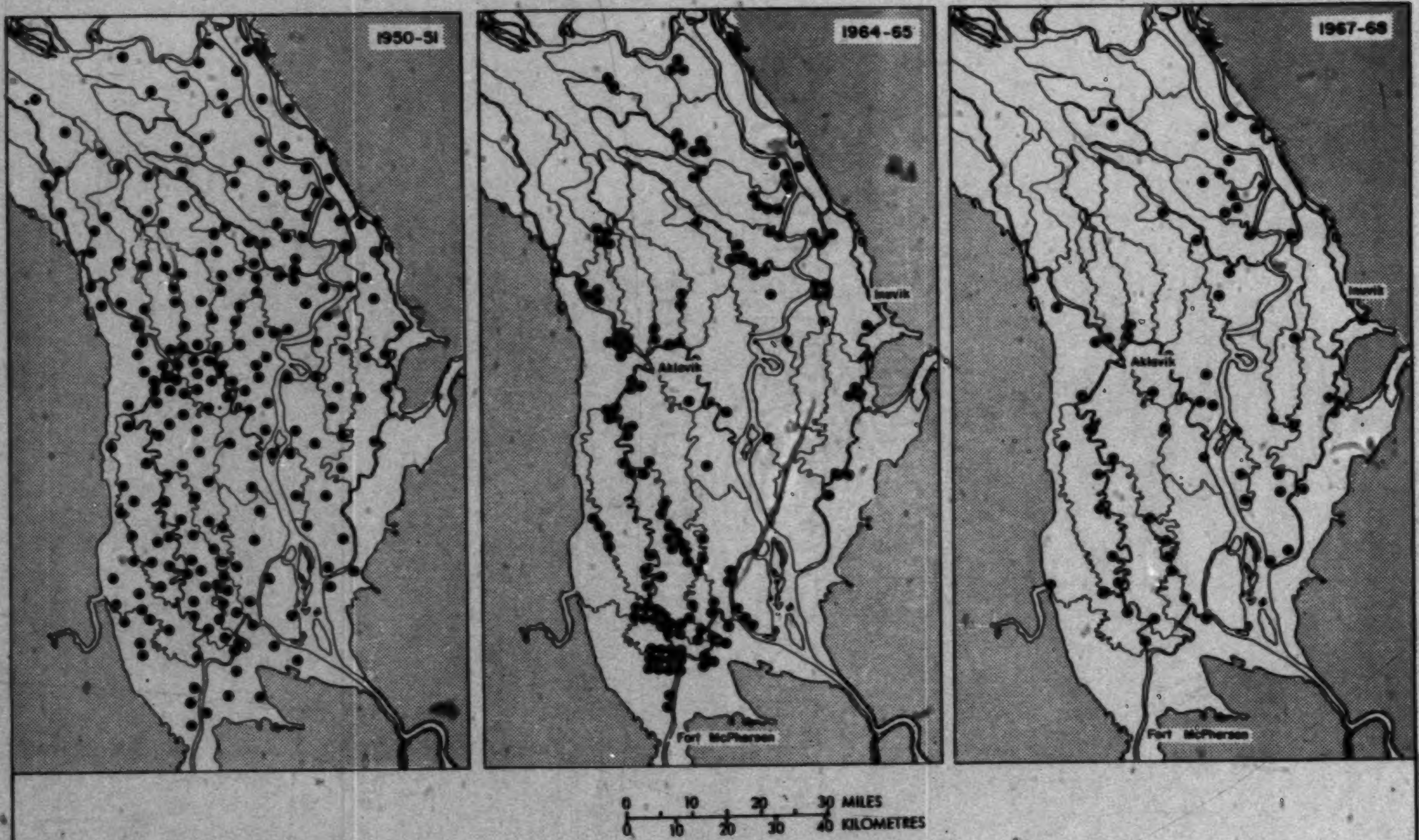

1950-51
1964-65
1967-68
Inuvik
Aklavik
Fort McPherson
0 10 20 30 MILES
0 10 20 30 40 KILOMETRES

FIGURE 8

DISTRIBUTION OF WINTER AND SPRING CAMPS IN THE MACKENZIE DELTA

(Source: Wolforth J. The Evolution and Economy of the Delta Community D.I.A.N.D. Ottawa, 1971)

Working on the construction of Inuvik did not compete with working on the land since the period of maximum construction activity--from June to September--coincided with the period of minimum trapping activity. However, for a large number of native people the attractions of settlement-living and its concomitant wage employment proved more permanent, and trapping was abandoned in favour of working in the settlement.

In 1955 detailed site investigations were made at Inuvik and some preliminary construction work was begun on the airstrip, wharf, storage warehouses and camp buildings. The town plan was completed and approved in 1956. The plan envisaged the creation of two residential neighbourhoods. The first neighbourhood, the "serviced" area, would have all the modern services and amenities found in southern Canada, and would accommodate administrators, skilled workers, Navy personnel and their families, nearly all of whom would come from southern Canada. Facilities would include central heating, hot and cold water, indoor plumbing and garbage collection. The pipes carrying the heating, water and sewage would be placed in utilidors (box-like, insulated containers) placed on pilings above ground level. Utilities could not be buried due to the presence of permafrost which would melt and cause ground subsidence. The larger buildings were to be placed on pilings to protect the permafrost from the heat from the buildings (see Pritchard, 1962, 1964 for further details).

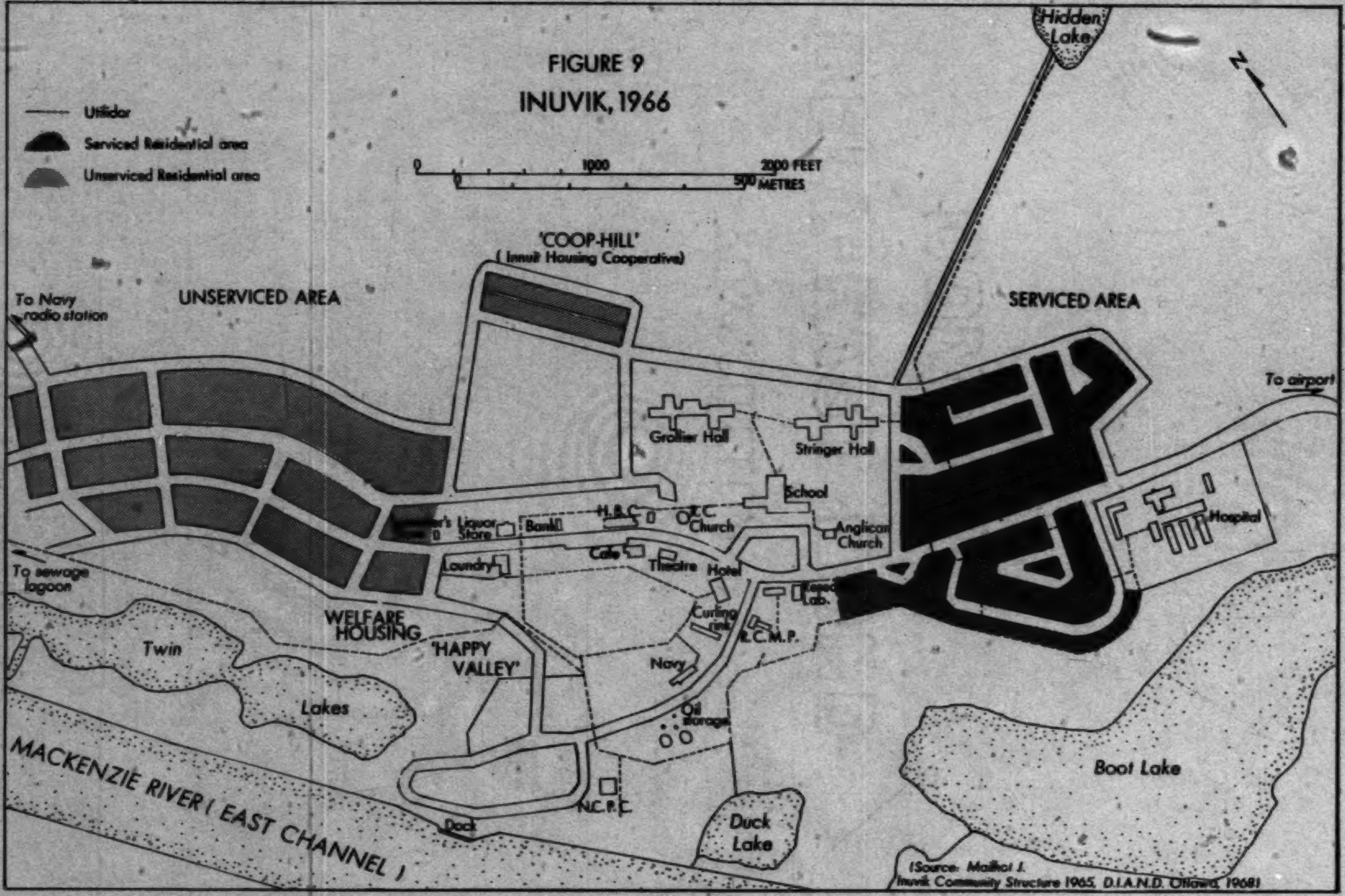
The second residential neighbourhood, the "unserviced" area, would be without modern amenities, and residents would heat by stove or space heater and have water delivered, and garbage and sewage collected by truck. This area was designed for those people who "may not be able to afford all the services at the costs that are involved in the

Arctic" (Robertson, 1956). The smaller buildings would be built on gravel pads rather than pilings. The development of these two neighbourhoods was instrumental in creating the socially segregated settlement which Inuvik was to become. The West end of the town, the "unserviced" area of the planning phase, became acknowledged as the native quarter where migrants from Aklavik and the other Delta settlements congregated; the East end, or "serviced" area of the planning phase became the residential area for government officials and other southern white transients. Even as late as 1966 the West end was unserviced (see Figure 9). Since then extensions have been made to the utilidor and most houses in the West end are now within reach of the utilidor, although not necessarily hooked up.

In 1956 the construction of roads and camp housing was undertaken in preparation for major projects scheduled for the summer of 1957. Meanwhile the campaign began to persuade permanent Aklavik residents to move "voluntarily" to Inuvik. Residents who moved to Inuvik were assured both compensation for their old building in Aklavik and the allocation of a new lot in Inuvik. Movement to Inuvik during the first two summers of construction was chiefly seasonal migration and involved mainly unskilled workers who returned to their permanent homes in Aklavik, the other Delta settlements, or to their "bush" camps in winter.

In 1955 the total permanent population of Aklavik was 820, including a substantial number of white residents (Honigmann, 1970, p. 54). Arrival of trappers in summer almost doubled the population. Eskimos from both Aklavik and the Delta area around Aklavik found employment in the construction of the DEW line and when the construction phase ended in November 1956, several of them found jobs in Inuvik. Prior to this

FIGURE 9
INUVIK, 1966


Utilidor
Serviced Residential area
Unserviced Residential area
0
1000
2000 FEET
0
500 METRES
N
Hidden Lake
'COOP-HILL'
(Innuit Housing Cooperative)
UNSERVICED AREA
SERVICED AREA
To Navy radio station
To airport
Grollier Hall
Stringer Hall
School
R.C. Church
Anglican Church
H.B.C.
Bank
Liquor Store
Cafe
Theatre
Hotel
Laundry
Hospital
Lab.
Curling rink
R.C.M.P.
Navy
Oil storage
N.C.P.C.
Dock
To sewage lagoon
WELFARE HOUSING
'HAPPY VALLEY'
Twin
Lakes
Duck Lake
Boot Lake
MACKENZIE RIVER (EAST CHANNEL)

(Source: Mailhot J.
Inuvik Community Structure 1965, D.I.A.N.D. Ottawa, 1968)

time the majority of the Eskimo population were living off the land, but having been exposed to wage employment and the advantages of settlement-living, many Eskimos moved into the settlements in the period 1958-61 (see Table 3 and Figure 8). Many Indian, Metis and white Aklavik residents who were more familiar with settlement living also found jobs in Inuvik during the construction phase. In 1958 Clairmont (1962) indicated the population of the Aklavik area to be 1,500, made up of 384 whites, 242 Indians, and 883 Eskimos. The permanent town population was approximately 700, comprising 350 whites, 200 Indians, and 150 Eskimos. The most permanent town dwellers were whites and Indians, with Eskimos making up the vast majority of the "bush" dwellers. In the three years between 1955-58 the permanent population of Aklavik had declined by approximately 120 people or 14.7 per cent.

An unusually good season in 1958 brought construction of Inuvik to the point where power, heat, water and sewage disposal plants could be in operation the following summer. In October 1958, the Northern Canada Power Commission (N.C.P.C.) completed installation of a diesel generating unit to supply the town with power. The original plan to haul some of the more solid buildings over the ice from Aklavik was abandoned, and in 1958 the Department of Northern Affairs and National Resources decided to continue a skeleton administration in Aklavik permitting those people who wished to remain to do so.

In 1958-59 sixty lots were reserved by Aklavik residents wishing to move to Inuvik (Annual Report of the Commissioner of the Northwest Territories, 1958-59). In 1959 private residences and apartments in the "serviced" area began to be occupied by new arrivals from the South. The thirty-classroom federal school was also completed this year with

TABLE 3

PERMANENT TOWN POPULATION OF AKLAVIK AND "BUSH" POPULATION TRADING FURS INTO AKLAVIK, 1955-61

	Permanent Town Population					"Bush" Population				
Year	White	Metis	Indian	Eskimo	Total	White	Metis	Indian	Eskimo	Total
1955[a]	n.a.	n.a.	n.a.	n.a.	820	n.a.	n.a.	n.a.	n.a.	n.a.
1958[b]	350	n.a.	200	150	700	34	0	42	733	809
1959[c]	188	187	145	148	674	n.a.	n.a.	n.a.	n.a.	n.a.
1961[b]	138	53	192	222	605	0	0	0	106	106

SOURCES: [a] Honigmann, 1970, p. 54.

[b] Clairmont, 1962, p. 2.

[c] Boek and Boek, 1960.

n.a. not available

its adjoining Roman Catholic and Anglican hostels, each designed to accommodate 250 children from outlying settlements. In September 1959, the school opened with 420 children registered, 109 from Inuvik (Honigmann, 1970, p. 59). Earlier in 1959 the Anglican Residential school in Aklavik had registered 106 pupils, and the Roman Catholic Residential school had registered 170 pupils, some from as far away as Spence Bay and Sachs Harbour. All children in these residential schools were from outside Aklavik. Pupils from Aklavik had to attend the federal day school in the settlement. With the opening of the new school in Inuvik the two residential schools were phased out in Aklavik and nearly all pupils were transferred to Inuvik. By the 1961-62 academic year the two residential schools in Aklavik had been closed completely and the federal day school registered 126 pupils, a decline from 176 in 1959-60 due to the transfer of people to Inuvik.

Despite the transfer of government departments, residential schools, commerical establishments, and the hospital from Aklavik to Inuvik during the two summers of 1959-60, the government opened the first Mackenzie Delta liquor store in Aklavik in 1959, and then transferred it to Inuvik in 1960. Many locals viewed this as a deliberate decision on the part of the government to entice them to Inuvik.

In 1959 Aklavik residents who had worked on the initial construction of Inuvik had to decide whether to remain in Inuvik and find other jobs, or return to Aklavik and resume trapping. A number of "push-pull" factors influenced the decisions of Aklavik residents to move to Inuvik permanently or to remain in Aklavik. In an attempt to encourage some families to stay in Inuvik the federal government offered over 70 jobs to relatively untrained workers in Inuvik, and another 57 positions for men who could be trained to fill them (Honigmann, 1970, p. 59). Additional employment was available from private employers. Housing was also available. The government gave natives the chance to purchase some of the "512"[1] frame houses which had been used in the construction camps. A house partitioned into three rooms cost $2,500 and could be bought in instalments.

In Aklavik "push" factors were also operating encouraging people to move to Inuvik. The relative availability of employment in Aklavik and Inuvik was obviously a vital factor. Conditions of employment were growing more difficult in Aklavik due to the transfer of the hospital and other federal agencies to Inuvik, and to the closure of the two residential schools. Trapping had ceased to be the "million dollar business" it had been in the 1940s, and for many people proved to be an inadequate source of income. Muskrat furs declined from $0.50 in 1956 to $0.31 in 1958 (Black, 1961). In 1958 the average total value of pelts to each trapper in the Mackenzie Delta was $101.00 (*ibid*.). In Aklavik the figure was slightly higher and the average income from trapping was $254.00 in 1958-59. Despite the decline in average trapping income during this time, from $282.00 in 1957-58, to $254.00 in 1958-59, and $190.00 in 1959-60, the number of General Hunting Licences issued in Aklavik rose. In 1957-58, 136 licences were issued; in 1958-59 the figure was 195, and in 1959-60, 204. In 1960-61 the number of General Hunting Licences declined to 172 but the average income from trapping rose to $303.00. These fluctuating incomes from trapping came at a time when a secure source of income was available in Inuvik, and for many trappers the attractions of wage employment proved permanent. By 1960 complete reliance on full-time trapping had declined to the point where only one permanent native resident in Aklavik earned his livelihood from the land (Spence, 1962, p. 85). Several other trappers who lived outside the settlement but traded their furs into Aklavik also depended on fishing, trapping and hunting. Eleven family heads combined trapping income with seasonal employment and supplemental welfare payments. Sixteen other family heads and eight single men maintained regular year round employment (ibid.).

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[1] So called because they measured 512 square feet.

By 1959, 285 native people had settled in Inuvik (Honigmann, 1970, p. 59). Approximately half (148) of these were from Aklavik or the Aklavik area (Boek and Boek, 1960). These figures probably do not give an accurate indication of the extent of movement between Aklavik and Inuvik since temporary movement between the two settlements was also important. The permanent population of Aklavik declined to 674 in 1959, including Army Signals personnel and R.C.M.P. (ibid.). In July/August 1959, Boek and Boek (1960) also indicate that 48 of the permanent Aklavik residents were temporarily in Inuvik at the time of their census and 18 people who gave Inuvik as their permanent address were visiting Aklavik.

Most of the native migrants to Inuvik lived in tents or self-made cabins in "Happy Valley" (see Figure 9), despite the government's plans in 1957 to phase out the tent population. In 1959, 62 families still lived in tents, but government policy was for tents and self-made cabins to be abandoned as soon as permanent accommodation became available for sale or rent. In 1961 "tent town" still existed and 27 families or 172 people lived in 41 dwellings there (Honingmann, 1969, p. 60). Tent town was so durable because of the lack of native housing and the inability of migrants to afford to buy those houses which were available. Most of the buildings were very overcrowded with an average of 4.2 people for a 150-250 square feet dwelling (Lotz, 1962). Other migrants living in the West end neighbourhood lived in "512" type houses or log houses.

The West end neighbourhood contrasted sharply with the East end which was inhabited mainly by civil servants and their families from southern Canada, or by government people transferred from Aklavik. "The two neighbourhoods of the town, the East and West ends, with their unequal housing, and town services make unmistakably manifest the vast cultural differences separating the two populations" (Honigmann, 1970, p. 62).

In 1960 construction began on a eighty-bed hospital, office buildings and staff housing in Inuvik. In addition to Northern Affairs, other government agencies included the R.C.M.P., Canadian Broadcasting Corporation, Northern Canada Power Commission, Transport, National Health and Welfare, Citizenship and Immigration, a post office and a liquor store. The close of the construction season in 1960 saw the completion of all major contract work. The new hotel, the Hudson's Bay Company Store, the Anglican and Roman Catholic churches were all complete. When the Department of National Defence moved into their new quarters in March 1961, the construction of Inuvik was virtually finished, and the relocation of functions from Aklavik completed. Over two hundred whites moved to Inuvik from Aklavik, including many single white sailors serving with the Department of National Defence (Clairmont, 1962).

By June 1961, Aklavik's population had declined to 599 according to the federal government census. Forty-five per cent of the population was under fifteen compared with the Canadian average of 34 per cent in 1961. Only 22.8 per cent of the permanent residents were white compared with 50 per cent prior to the transfer of government officials to Inuvik (Clairmont, 1962, p. 2).

Activity in Aklavik continued despite the growth of Inuvik, and the government was forced to recognize the fact. The Annual Report of the Commissioner in 1961-62 states: "Many Aklavik residents did not take advantage of the government assistance offered to those moving and elected to remain." In addition Baird suggested in 1960 that migration to Inuvik in the years following the construction phase would be selective:

> Older Aklavik residents may not wish to move at all; younger ones, especially those who learnt new trades and skills when Inuvik was being built are most likely to be among the first attracted to what the new community has to offer . . . no one will be under any kind of pressure and those who do move will be influenced by the sort of considerations that influence people everywhere--job and trades training opportunities, social services, better housing, the example of their friends . . . no one will be encouraged to drift into Inuvik and hang around on the chance of picking up a job (pp. 12-13).

The decline of employment possibilities in Aklavik with the transfer of government functions to Inuvik led to greater reliance on welfare payments. In 1957-58, $13,360 was spent in social assistance. The figure for 1958-59 was $16,953, and for 1959-60, $27,066. In recognition of the need for new employment possibilities in Aklavik the government initiated two new projects in 1959. The first of these was the Aklavik fur garment project which later became a cooperative and still exists today. This was designed to employ the segment of the population who had previously been employed as household help and baby sitters before the transfer of government personnel to Inuvik.

Many Indian and Eskimo women had had to rely on monthly welfare payments when their employers moved to Inuvik. The government began a fur garment training course in April 1959, and 25 women enrolled during the first year. Twenty-three of these were Eskimo, two were Indian.

The second project initiated by the government in 1959 to stimulate Aklavik's economy was a logging and sawmill project, providing seasonal employment for 25 men. The sawmill was located at Pokiak Point, a quarter of a mile across the Peel Channel of the Mackenzie River from Aklavik. Workers were paid on a piece-work basis for cutting and shipping the logs to the saw mill and on an hourly rate for work in the mill. The project was later abandoned in 1966. By 1960-61 social assistance expenditures had declined to $21,450 from $27,066 in 1959-60. Table 4 illustrates the unsatisfactory nature of employment in the settlement, despite these two projects. Out of a labour force of 331 (1961 Census), only 69 people, or 21 per cent of the labour force were permanently employed.

Using the census data gathered during the summer of 1974 it is possible to give some indication of the selectivity of migrants to Inuvik during the construction phase, from 1955-61, the motivations for the move, and the permanency of movement. The limitations of the data were indicated in Chapter I and should be re-emphasized here. In Aklavik thirty-five households were missed altogether due to the fact that no resident could be contacted in the summer. The interviews relied on the memories of the migrants for a period thirteen to nineteen years previously and the data are therefore subject to the limitations imposed by the reliability of their memories. Moreover, people who died or migrated elsewhere between 1955-74 have inevitably been

TABLE 4

EMPLOYMENT AND INCOME IN AKLAVIK, 1961

Employment	Employer	Number of Employees	Salary	Ethnicity
Garment making	Aklavik Fur Shop	21 permanent	$150/mo.	1 w. 12 E. 18 I.
Sawmill	Government	25 (12 permanent, 13 seasonal)	$400/mo.	5 w. 10 E. 10 I.
Clerks	Hudson's Bay Company	5 permanent	$200/mo.	2 w. 3 I.
Delivering Oil	Imperial Oil	2 permanent 2 seasonal	$300/mo.	1 w. 3 I.
Cafe help/clerk	Karl Gardlund	5 permanent	$?	E.
Power House	N.C.P.C.	3 permanent	$400/mo.	2 w. 1 E.
Agent	Pac. Western Airlines	1 permanent	$250/mo.	1 E.
Special Constable	R.C.M.P.	3 officers	$200/mo.	?w. ?M
Transport		4 permanent	$400/mo.	2 w. 2 E.

SOURCE: Bissett, 1967, p. 127.

^{W}White ^{E}Eskimo

^{I}Indian ^{M}Metis

excluded from analysis.

With the above qualifications in mind it is possible to identify certain characteristics of the migrants. Out of a total of 103 interviewees[2] in Aklavik, 45 had lived in Inuvik during the construction period, from 1955 to 1961. In Inuvik out of a total of 96 migrants from Aklavik who were interviewed, 60 had moved to Inuvik between 1955-61. Table 5 compares the age-sex structure of permanent migrants to Inuvik during the construction period with migrants who lived in Inuvik during the construction period, and who subsequently moved back to Aklavik (return-migrants). The ages of the migrants have been extrapolated back to 1961. The age-sex structure of the 1961 permanent population of Aklavik is also compared with that of the migrants. The 1961 census includes some of the Aklavik residents who lived in Inuvik between 1955-61 and had already returned to Aklavik,but the numbers are small enough to affect the age-sex structure only marginally,and therefore the 1961 age-sex structure can be taken to be that of the Aklavik non-migrants.

Out of a total of 105 migrants to Inuvik during the period 1955-61 who were interviewed, 76 per cent were between 15-44 years of age in 1961. This compares with 42.5 per cent of Aklavik's permanent population who were between 15-44 years. It would appear from Table 5 that migration was selective of the younger age groups, for both permanent migrants to Inuvik, and for return-migrants to Aklavik.

The small number of people in each occupational category make it difficult to determine how selective migration to Inuvik was in

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[2] Usually the head or spouse of the head of household.

TABLE 5

AGE[1]-SEX STRUCTURE OF MIGRANTS TO INUVIK, 1955-61, COMPARED WITH AGE-SEX STRUCTURE OF AKLAVIK'S PERMANENT POPULATION, 1961

	Migrants from Aklavik[2] to Inuvik 1955-61 who were still there in 1974				Migrants from Aklavik[2] to Inuvik who later moved back to Aklavik				1961 Government[3] census of Aklavik			
Ages	Male	%	Female	%	Male	%	Female	%	Male	%	Female	%
0-14	3	9.4	3	10.7	2	9.1	2	8.7	127	40.5	141	49.5
15-44	22	68.8	21	74.9	17	77.3	20	87.0	137	43.6	118	41.4
45-64	7	21.8	4	14.4	3	13.6	1	4.3	36	11.5	14	4.9
65+	0	0	0	0	0	0	0	0	14	4.4	12	4.2
TOTAL	32	100	28	100	22	100	23	100	314	100	285	100
%M:F	53.4		46.6		48.8		51.2		52.4		47.6	

[1] Ages extrapolated back to 1961.

SOURCES: [2] July-August, 1974 interviews in Inuvik and Aklavik

[3] Government Census, 1961

terms of occupation. However, it is significant that of the return-migrants over a third gave their occupation as hunter/trapper/fishermen whilst none of the people who remained in Inuvik were classified as such (see Table 6). It seems probable that the number of full-time hunter/trapper/fishermen is considerably lower than this figure, as indicated by the 1961 Census figure (4). Unemployed persons, or those people relying on supplemental welfare payments and seasonal employment classified themselves as hunter/trapper/fishermen if they had no permanent employment, but engaged in part-time traditional activities. The 1961 Census excluded from the labour force seasonal workers who were neither working nor seeking employment during the week before the Census. In June most hunter/trapper/fishermen would fall into this category and therefore would be excluded from the labour force.

Table 7 gives further information as to the occupations of the migrant population. The first part of the table is concerned with Aklavik residents who migrated to Inuvik during the construction phase and subsequently moved back to Aklavik. The occupation of the migrants prior to the move is compared to their occupation in Inuvik and their occupation in 1974 in Aklavik. The second part of the table gives similar occupational information about permanent migrants to Inuvik. It would appear that the move to Inuvik altered the occupations of most return-migrants and permanent migrants. Table 7 reveals that a large number of people were hunters and trappers in Aklavik prior to the move. In Inuvik labouring and service jobs predominate. Return-migrants did not all return to hunting and trapping but a higher proportion of them returned to service jobs or occupations in the managerial, and professional/technical categories. It would seem that their

TABLE 6

PERMANENT OCCUPATION OF MIGRANTS TO INUVIK, 1955-61 (COMPARED WITH PERMANENT OCCUPATION OF AKLAVIK'S 1961 POPULATION (Population 15+ years)

Occupation	Migrants to Inuvik[1] 1955-61 who were still there in 1974 Number	%	Migrants to Inuvik[1] 1955-61 who returned to Aklavik later Number	%	1961 Government Census of Aklavik[2] Number	%
Managerial	3	6.7	3	9.4	8	5.3
Professional/ Technical	9	20.2	3	9.4	16	10.6
Clerical	0	0	0	0	4	2.6
Sales	4	8.9	1	3.1	6	3.9
Service & Recreation	11	24.5	8	25.0	65	43.3
Transport & Communication	4	8.9	0	0	2	1.3
Farmers & Farm Workers	0	0	0	0	0	0
Loggers & related workers	0	0	0	0	2	1.3

TABLE 6 (continued)

Occupation	Migrants to Inuvik[1] 1955-61 who were still there in 1974		Migrants to Inuvik[1] 1955-61 who returned to Aklavik later		1961 Government Census of Aklavik[2]	
	Number	%	Number	%	Number	%
Fishermen/ hunters/ trappers	0	0	11	34.3	4	2.6
Craftsmen Production	7	15.5	3	9.4	23	15.2
Labourers	7	15.5	3	9.4	11	7.3
Not Stated	0	0	0	0	10	6.6
TOTAL	45	100	32	100	151	100
	(Housewives--10 Senior Citizens--3 Unemployed--2)		(Housewives--10 Senior Citizens--3)			

SOURCES: [1] July-August 1974, interviews in Aklavik and Inuvik.

[2] Government Census of Aklavik, 1961.

TABLE 7

OCCUPATIONS OF PERMANENT INUVIK MIGRANTS AND RETURN-MIGRANTS WHO LIVED IN INUVIK FROM 1955-61

Occupations	Return-Migrants						Permanent Migrants			
	Occupation in Aklavik prior to move		Occupation in Inuvik		Occupation in 1974		Occupation in Aklavik prior to move		Occupation in 1974 in Inuvik	
	Number	%	Number	%	Number	%	Number	%	Number	%
Managerial	1	2.9	0	0	3	9.4	4	6.7	3	5.0
Professional/ Technical	1	2.9	0	0	3	9.4	4	6.7	9	15.0
Clerical	0	0	0	0	0	0	0	0	0	0
Sales	0	0	0	0	1	3.1	4	6.7	0	0
Service & Recreation	2	5.9	8	16.2	8	25.0	8	13.3	11	18.3
Transportation & Communication	0	0	0	0	0	0	1	1.7	4	6.7
Fishermen/ Hunters/ Trappers	25	73.6	0	0	11	24.4	0	0	0	0

TABLE 7 (continued)

Occupations	Return-Migrants						Permanent Migrants			
	Occupation in Aklavik prior to move		Occupation in Inuvik		Occupation in 1974		Occupation in Aklavik prior to move		Occupation in 1974 in Inuvik	
	Number	%	Number	%	Number	%	Number	%	Number	%
Craftsmen & Production	1	2.9	4	10.8	3	9.4	6	10.0	7	11.7
Labourers	4	12.4	25	67.7	3	9.4	1	1.7	7	11.7
TOTAL	34	100	37	100	32	100	55	100	45	100
	(Unemployed--4 School in Aklavik-- 7)		(School in Inuvik-- 5 Unemployed 3)		(Housewives--10 Senior Citizens-- 3)		(School in Aklavik--5)		(Housewives--10 Senior Citizens-- 3 Unemployed 2)	
Total interviewed		45		45		45		60		60

SOURCE: July-August Interviews in Inuvik and Aklavik migration to Inuvik altered their aspirations and many found it difficult to return to hunting and trapping after exposure to the wage economy and the advantages of settlement-living. For many migration resulted in a rise to the higher status occupations.

An examination of the most typical sequence of occupations for individual migrants lends support to the idea that migration resulted in a change in occupation for a majority of people. The most typical sequence of occupation for return-migrants was from fishing/hunting and trapping in Aklavik to either labouring or service jobs in Inuvik. On returning to Aklavik the majority of the service workers remained in this category or engaged in craft production, and the labourers moved into the following occupational categories in order of importance: fisherman/hunter/trapper; professional/technical; service/recreational; and managerial. For permanent Inuvik migrants the two most typical sequences of occupations were firstly, from service, recreational and sales categories in Aklavik to service and recreational categories in Inuvik, and secondly, from fisherman/hunter/trapper in Aklavik to labouring, professional/technical and transportation and communications categories in Inuvik.

Table 8 is concerned with the selectivity of migration according to ethnic background. It is significant that 80 per cent of the total migrants of Indian ethnicity remained in Inuvik, whilst 20 per cent returned to Aklavik. In contrast a slightly higher proportion of Eskimo migrants returned to Aklavik than remained in Inuvik. Over three-quarters of the Metis migrants returned to Aklavik, whilst the reverse was true for white migrants, with over three-quarters of them remaining in Inuvik. Migrants of Indian and white ethnicity appear to have adjusted more readily to wage employment in Inuvik, whilst Eskimo and Metis migrants were more temporary residents of the new town. The highest number of permanent migrants to Inuvik were of Indian ethnicity, followed by Eskimos, whites and Metis. The highest number of return-migrants were of Eskimo ethnicity, followed by Metis, Indian and white (see Table 8).

TABLE 8

ETHNICITY OF PERMANENT AND RETURN-MIGRANTS WHO LIVED IN INUVIK,1955-61

Ethnicity	Permanent Inuvik migrants			Return-Migrants to Aklavik			
	Number	%	% of that ethnicity	Number	%	% of that ethnicity	
Indian	24	40.0	80.0	6	13.4	20.0	100%
Eskimo	23	38.4	43.7	25	55.6	56.3	100%
Metis	3	5.0	21.5	11	24.4	78.5	100%
White	10	16.6	76.9	3	6.6	23.1	100%
TOTAL	60	100		45	100		

SOURCE: Interviews in Aklavik and Inuvik, July-August, 1974.

Table 9 is concerned with the migrants' reasons for moving. Employment was the major factor encouraging migration to Inuvik, totalling 80 per cent of the reasons given. Forty-two people moved to Inuvik to work on the construction of the town; 18 were transferred there, and 26 moved in search of a job.

A higher number of permanent migrants to Inuvik were transferred there, whilst a higher number of return-migrants moved to the new town in search of a job.

TABLE 9

MIGRANTS' REASONS FOR MOVING TO INUVIK, 1955-61 (more than one possible)

Reason for Move	Permanent Migrants		Return-Migrants to Aklavik	
	Number	%	Number	%
To work on construction	22	36.2	20	43.5
Job transfer	15	24.7	3	6.5
In search of job	8	13.1	18	39.1
Reindeer Station closed	1	1.6	0	0
Parents to bush	2	3.3	0	0
School	3	4.9	3	6.5
Health	1	1.6	0	0
More opportunities	1	1.6	0	0
Mink farm closed	1	1.6	0	0
Family member died	1	1.6	0	0
Children's education	2	3.3	0	0
Personal	1	1.6	0	0
Parents moved to Inuvik	3	4.9	2	4.4
TOTAL	61	100	46	100

SOURCE: July-August interviews in Inuvik and Aklavik, 1974

Table 10 lists the reasons Aklavik return-migrants gave for moving back. Nearly half of the responses listed family and friends in Aklavik as the reason for returning to Aklavik. Twenty per cent of the responses indicated that food was more easily obtained in the Aklavik area due to better hunting/trapping and fishing areas located nearer the settlement than Inuvik, and this was their reason for moving back to Aklavik.

Over half the migrants who subsequently returned to Aklavik stayed in Inuvik for less than two years (See Appendix C). A high percentage of residents in both settlements expressed a desire to remain there. Eighty-five per cent of Inuvik permanent migrants and 91 per cent of Aklavik return-migrants wished to remain in their respective settlements (see Appendix D).

TABLE 10

REASONS WHY AKLAVIK RETURN-MIGRANTS MOVED BACK
(more than one possible)

Reason for Move Back	Number	Per Cent
School	1	1.6
Health	1	1.6
Family/Friends	31	48.4
Business	2	3.1
Food easier to obtain	13	20.3
Hated Inuvik	8	12.5
Too much drinking in Inuvik	5	7.8
Job ended	2	3.1
Retirement	1	1.6
TOTAL	64	100

SOURCE: Interviews in Aklavik and Inuvik, July-August, 1974.

Both groups of migrants listed "good hunting/trapping/fishing" as a major attraction of Aklavik. Sixteen per cent of the responses given by permanent Inuvik migrants, and 29 per cent of the responses of return-migrants cited this factor. In addition both groups agreed that Aklavik is a quieter, friendlier and more peaceful place than Inuvik. Permanent migrants were readier to point out the shortcomings of Aklavik, particularly the site problems and lack of facilities. Return-migrants did not appear to be concerned by these drawbacks to living in Aklavik.

Better facilities and greater employment possibilities were cited as the major attractions of Inuvik. Twenty-four per cent of the responses given by Inuvik permanent migrants listed better facilities as a major attraction of the town, and 25 per cent of the responses indicated that job security was a major factor encouraging them to stay in Inuvik (see Appendix E).

Both groups perceived Inuvik as "too big." Thirty-five per cent of the responses of Inuvik permanent migrants, and 42 per cent of the responses of return-migrants listed this factor as a major dislike of Inuvik. Both groups cited "too much drinking" as a major shortcoming of Inuvik and also perceived Inuvik as socially unfriendly (see Appendix E).

In summary, the establishment of Inuvik accelerated the trend towards permanent settlement living, and involvement in the wage economy. The construction of the town created a large number of unskilled jobs which many Aklavik residents were able to accept at a time when fur prices were declining. Availability of employment in Inuvik was the major factor encouraging migration to the new town. Migration was selective of the younger age groups and many were able to find permanent employment in Inuvik. However, there were insufficient jobs to absorb everyone and some people had to return to Aklavik where they were at least able to obtain food from the land, even if they were unable to find employment in the settlment. Many wished to return to Aklavik because their family and friends were there, and they disliked Inuvik because they perceived it as too big and unfriendly. Others wished to obtain food more cheaply from traditional resource harvesting, and Inuvik was too far from good hunting and trapping areas. Amongst the group of return-migrants were several people who, having been exposed to the wage economy and advantages of settlement living, did not wish to return to the land, and the number of hunters/trappers/fishermen declined considerably accompanied by an increase in the number of permanent settlement dwellers.

In 1967 Mackay stated: "Aklavik is in a period of transition and its future function remains uncertain," and Bissett wrote in the same year: "Aklavik is . . . in a state of flux." Both comments give an apt description of the situation in Aklavik at the close of the construction phase of Inuvik in 1961. The construction of Inuvik had had profound effects on Aklavik both socially and economically, and the future function of the settlement of Aklavik was very uncertain as this period came to a close in 1961.

CHAPTER IV

PERMANENT AND TEMPORARY MOVEMENTS BETWEEN AKLAVIK AND INUVIK, 1962-1974

> Aklavik is growing again. Many of the people who moved away from here in the '50s when they were building Inuvik are now moving back. . . . The future is bright for Aklavik. Aklavik's motto of "Never Say Die" speaks for itself. (Aklavik Hamlet Council, 1974)

> In general the occupations for which native people were trained were related to the construction phase rather than the administrative phase. (Wolforth, 1971)

PERMANENT MIGRATION

The two quotations cited at the beginning of the chapter illustrate one trend in permanent migration which was apparent during the period 1962-74, and one major reason for this trend. Although the volume of migration from Inuvik back to Aklavik was smaller than the volume of migration to Inuvik, it was a significant and unforeseen development. One major factor which accounts for this movement is the reduction in the number of unskilled labourers required in the new town after 1961, and the inability of Aklavik residents to accept other employment related to the administrative phase of Inuvik, due to their lack of educational qualifications and technical skills. In addition, social factors, including family ties, were very important considerations for return-migrants, and the availability of food from the land was also a vital factor. The return of government interest and capital into Aklavik in the second half of the last decade and the early part of this decade has both resulted from, and further encouraged, this migration back to Aklavik.

Volume of Migration

There were fewer migrants moving between Aklavik and Inuvik during the period 1962-74 than during the preceding period (Table 11). A total of fifty households[1] migrated during the period 1962-74 compared with 105 during the construction period. Twenty-eight families moved back to Aklavik, including 14 who had moved to Inuvik during the 1955-61 period. Aklavik had a net migratory loss and Inuvik a net migratory gain of 74 families during the 1955-61 period, and 22 families during the 1962-74 period. Over the total time period under study, from 1955-74 Inuvik had a net gain, and Aklavik a net loss of 96 families from Aklavik.

TABLE 11

VOLUME OF MIGRATION AKLAVIK - INUVIK
(Numbers of households moving between the two settlements)

	1955-61			1962-74			1955-74		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Permanent migrants to Inuvik	32	28	60	12	24	36	44	52	96
Non-permanent migrants to Inuvik	22	23	45	7	7	14	29	30	59
TOTAL MIGRANTS TO INUVIK	54	51	105	19	31	50	73	82	155
Return-migrants to Aklavik	12	19	31	17	11	28	29	30	59

SOURCE: Interviews in Aklavik and Inuvik, July-August 1974.

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[1] Interviews were conducted in terms of households. Thus in some cases several migrants would occupy the same household, but only the head or spouse of each household was interviewed. Except where otherwise

Age Selectivity

According to Jansen (1970), age is the only universal migration differential, and young people are more prone to migrate than other age groups. This is certainly true in the Aklavik-Inuvik situation where 82 per cent of the household heads were aged between 15-44 years when they moved. This contrasts with the percentage of permanent Aklavik residents in the 15-44 years age range in 1974, which is 42.5 per cent. In both the construction period and the later period the majority of the migrants were aged between 15-44 years[2] (see Table 12).

Of those migrants who subsequently returned to Aklavik, 93 per cent were aged 15-39 years at the time of moving, and therefore migration back to Aklavik was again selective of the younger age groups. This was contrary to what was expected since it was anticipated that migration back to Aklavik would be mainly confined to older migrants who were more orientated to the traditional economy.

Sex and Marital Status Selectivity

It is not possible to establish how selective migration was according to sex or marital status for two reasons. Firstly, marital status was obtained for the 1974 population and not for the year in which the migration occurred. Secondly, most of the interviews were conducted during the day and this biassed interviewing towards female migrants, which explains the discrepancy between males and females. (A ratio of 12 males to 36 females for permanent migrants to Inuvik.)

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noted all statistics for this chapter refer to families represented by the head of household or the spouse, and the data were collected during interviews in July-August 1974 in Inuvik and Aklavik.

[2] The head of household was assumed to be the initiator of the migration, and therefore the selectivity of migration was determined

TABLE 12

AGE-RANGE OF HEADS OF MIGRANT HOUSEHOLDS, AND AKLAVIK NON-MIGRANTS, 1974*

Age	Permanent Migrants to Inuvik		Return-migrants to Aklavik		Total Migrants		Total Permanent Population of Aklavik, 1974	
	Number	%	Number	%	Number	%	Number	%
0 - 14	1	2.8	0	0	1	2.0	321	43.0
15 - 44	28	77.7	13	92.8	41	82.0	317	42.5
45+	7	19.5	1	7.2	8	16.0	108	14.5
TOTAL	36	100	14	100	50	100	746	100

*Ages extrapolated back to age at which the person migrated.

SOURCE: Aklavik-Inuvik interviews, July-August, 1974.

Ethnic Selectivity

It is possible to determine how selective migration was according to ethnic status, and there are some contrasts with the preceding period. Table 13 reveals that the number of migrants is highest amongst people of Eskimo ethnicity. However, Eskimos represent the largest proportion of Aklavik's permanent population with 43 per cent of the 1974 population claiming Eskimo ethnic status. If the number of migrants for each 1,000 Eskimos in the 1974 census is calculated, Eskimos are found to be the most migratory group in Aklavik between 1962-74. One hundred and six per 1,000 Eskimos migrated between 1962-74, compared with 46 per 1,000 Indians, 44 per 1,000 whites, and 29 per 1,000 Metis.

TABLE 13

ETHNICITY OF MIGRANTS 1962-74

Ethnic Origin	Permanent Migrants to Inuvik		Return-Migrants		Total Migrants	
	Number	%	Number	%	Number	%
Indian	6	16.7	1	7.1	7	14.0
Eskimo	26	72.3	8	57.2	34	68.0
Metis	2	5.5	4	28.6	6	12.0
White	2	5.5	1	7.1	3	6.0
TOTAL	36	100	14	100	50	100

SOURCE: Interviews in Aklavik-Inuvik, July-August 1974.

Nearly three-quarters of the permanent Inuvik migrants were Eskimo, contrasting sharply with the preceding period, where only 38 per cent were of Eskimo ethnic origin. A high percentage of the return-migrants were also Eskimo, as in the 1955-61 period. It would appear

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according to his or her characteristics.

that Eskimos responded most readily to short-term employment possibilities in the 1962-74 period, and were extremely mobile. Eskimos were employed on the DEW line in the 1950s and have been favoured by Arctic oil and gas exploration.

Migrants of Indian ethnicity are over-represented in the permanent migrant group relative to the return-migrant group. This is true both for this period and for 1955-61 (see Table 8, Chapter III). A larger proportion of Indian residents from Aklavik appear to have adjusted to living permanently in Inuvik. Three-quarters of the Metis population who moved to Inuvik during this period subsequently returned to Aklavik, a similar proportion to the preceding period.

Table 13 reveals very little about white migrants. Most of the temporary white population had been transferred to Inuvik by 1961 although a small number were transferred between 1961-62. Some of the permanent white population no doubt moved directly to other settlements without living in Inuvik, and others had left Inuvik by 1974, and these people have inevitably been excluded from analysis in the census of July-August, 1974. An examination of Table 14 reveals the change in ethnic breakdown of Aklavik's population between 1961-74 (see also Figure 10).

In 1961 according to Clairmont (1962), the white population of Aklavik amounted to 22.8 per cent of the total population and the Metis to 8.8 per cent. By 1974 the figures give the proportion of Metis as 27.5 per cent, and white 9.1 per cent (Table 14). The discrepancy between these figures is not due to the mass migration of white residents to Inuvik, since most of the white residents had migrated to Inuvik by 1961, but is due to a different interpretation of the term "Metis."

TABLE 14

ETHNIC BREAKDOWN OF AKLAVIK'S POPULATION, 1961-74

Year	Indian	Eskimo	Metis*	White*	Total
1961	192 (31.7%)	222 (36.7%)	53 (8.8%)	138 (22.8%)	605[a] (August)
1965	114	282	203**		629[b] (December)
1966	n.a.	n.a.	n.a.	n.a.	611[c] (June)
1967	160	282	129	42	613[d] (March)
1970	n.a.	n.a.	n.a.	n.a.	675[e]
1971	n.a.	n.a.	n.a.	n.a.	665[f] (June)
1973	173	319	259**		708[g] (June)
1974	152 (20.4%)	321 (43%)	205 (27.5%)	68 (9.1%)	746[h] (July-August)

*Yearly discrepancies between Metis and whites indicate the differences in interpretation of a person's ethnic status.

**Metis and whites were taken together for these years.

SOURCES: [a] Clairmont, 1962
[b] Bissett, 1965
[c] 1966 Census (government)
[d] Makale et al., 1967
[e] Simenon et al., 1970
[f] 1971 Census (government)
[g] Mackenzie Valley Development Planning Implications 1974
[h] 1974 Census (author's)
n.a.: not available

Clairmont restricts its use to people with a white father and native mother, whilst the present author uses the term to describe all those people with parents belonging to different ethnic groups (see Chapter V). If the percentages of Metis and whites in the population are taken together, Clairmont's figure is 31.6 per cent, and the 1974 Census figure is 36.6 per cent, which reveals considerably less discrepancy. The 1966 Government of the Northwest Territories Community data

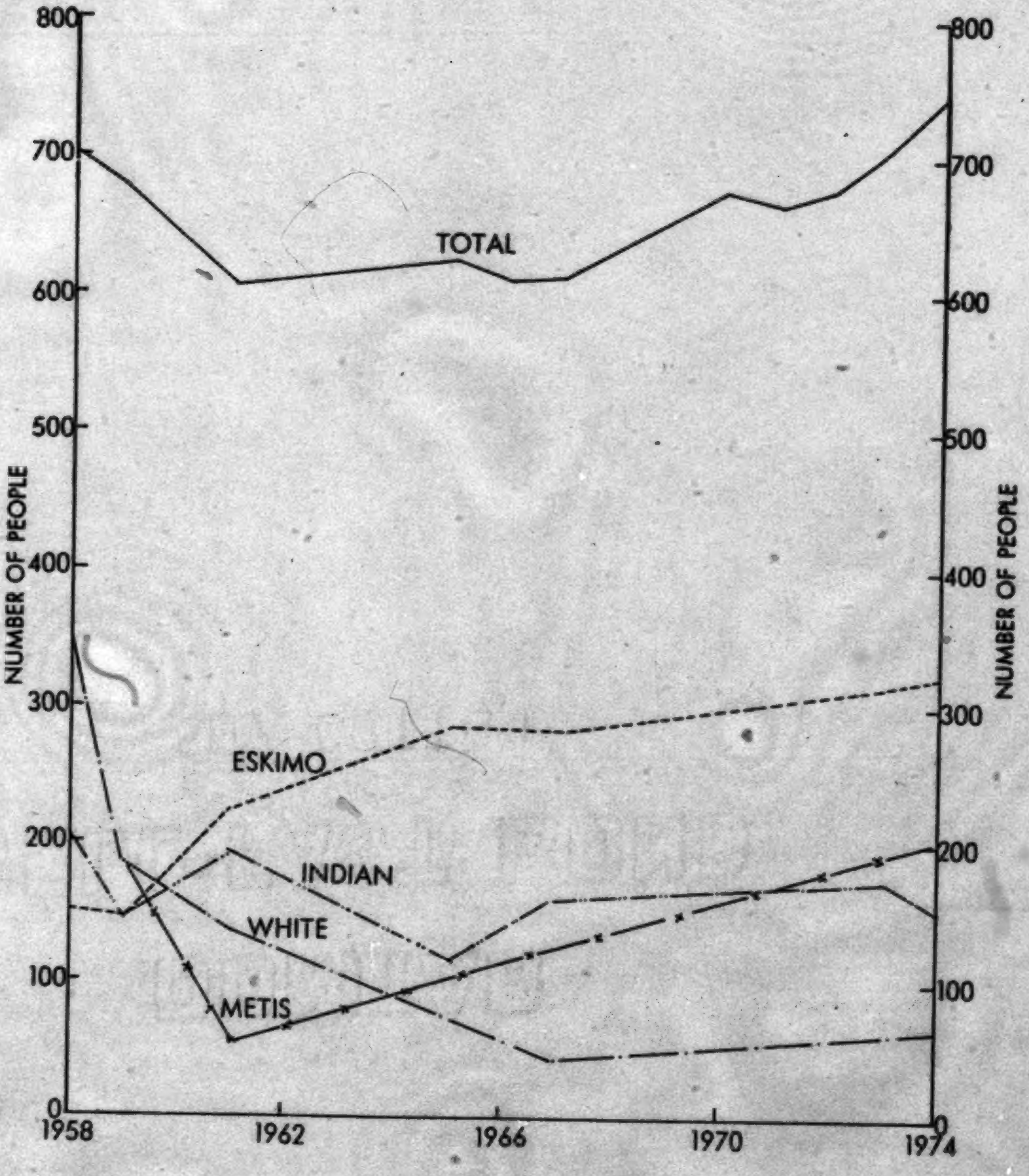

FIGURE 10

AKLAVIK POPULATION TRENDS
1958-74

For population data sources, see text

indicate that 15 per cent of the population of Aklavik was white in 1961, and it seems probable that their definition of white rather than Clairmont's coincides with the author's. If this figure is taken to be representative of the proportion of whites in the community in 1961, the overall decline in white residents of Aklavik is from 15.0 per cent to 9.1 per cent. The temporary white population of Aklavik has not declined greatly over the period (although there has been a large turnover of personnel). Fifty-five temporary residents were recorded by Clairmont in 1961, and 41 in the 1974 Census. Almost without exception temporary residents in Aklavik are of white ethnic origin, and therefore there can be no misrepresentation of these figures by a different interpretation of the term "Metis." The decline of 5.9 per cent in white residents between 1961-74 must be due to the out-migration of permanent white residents.

Table 14 also reveals certain trends which are at least partly explicable by migration together with demographic trends within the population itself. Between 1961-74 the proportion of Indians in the population declined from 31.7 per cent to 20.4 per cent. Since the birth rate did not decline during this period, nor the death rate increase, the explanation must lie with migration, and most of this migration has taken place between Aklavik and Inuvik. The proportion of Eskimos increased from 36.7 per cent to 43 per cent over the same period and this must chiefly be due to the movement of "bush" Eskimos into the settlement rather than to migration from other settlements.

Occupational Selectivity

There appears to be a significant difference between the occupational status of migrants and non-migrants, and also between permanent migrants and return-migrants. A further contrast exists between the occupations of return-migrants to Aklavik who moved to Inuvik in the period 1955-61, and those who moved in the period 1962-74. An analysis of the data relating to occupations of migrants who returned to Aklavik reveals some interesting points. Over the total period 1955-74, 59.3 per cent of the return-migrants were directly employed in construction or labouring jobs in Inuvik, and a further 16.9 per cent were involved in service jobs connected with the construction of the new town, or later with services provided in the new town, for example "construction camp cook," waitress, etc. (see Appendix F).

A total of 76.2 per cent were employed in unskilled labouring or service occupations. The percentage of return-migrants within the earlier period, 1955-61, who worked on construction, service and labouring jobs is considerably higher. A total of 90.8 per cent of the migrants who had moved back to Aklavik by 1961 were in the unskilled, labouring or service categories, directly or indirectly concerned with the construction of Inuvik. In contrast only 50 per cent of the return-migrants who lived in Inuvik between 1962-74 were employed in these categories.

These figures reveal certain features, firstly about the selectivity of return-migrants according to occupational status, and secondly about the type of jobs available in Inuvik during the period 1955-74. The decline both in absolute number of migrants moving to Inuvik, and in the category of unskilled labourers reveals a change from the construction phase of Inuvik to the administrative phase of the new town, which demanded different types of skills and educational qualifications, not possessed by the vast majority of Aklavik's native population.

Table 15 compares the occupations of total migrants in Aklavik prior to the move, with their permanent 1974 occupations, and the permanent 1974 occupations of non-migrants. The table reveals both a contrast between migrants' and non-migrants' occupational status, and an improvement in occupational status with the migrations (see also Appendices G and H).

TABLE 15

OCCUPATIONS OF TOTAL MIGRANTS PRIOR TO THE MOVE, IN AKLAVIK, AND IN 1974, COMPARED WITH THE PERMANENT 1974 OCCUPATIONS OF NON-MIGRANTS IN AKLAVIK
(excludes school children and pre-school children)

Occupational Group	Total Migrants to Inuvik, 1962-74				Aklavik Non-Migrants	
	Occupation Prior to Move		Occupation in 1974		Occupation in 1974	
	Number	%	Number	%	Number	%
Managerial	2	4	4	8	11	2.7
Professional/Tech.	1	2	7	14	33	8.2
Clerical	1	2	2	4	4	1.0
Sales	0	0	0	0	13	3.2
Service/Rec.	8	16	6	12	33	8.2
Transportation	1	2	3	6	1	0.2
Fishermen, etc.	17	34	5	10	108	26.7
Crafts	3	6	4	8	15	3.7
Labourers	1	2	2	4	7	1.7
Unemployed	5	10	3	34	53	44.4
Housewives	0		12		93	
Senior Citizens	0		2		23	
Not Stated	0		0		10	
	39	100	50	100	404	100

Educational Selectivity

In addition to age, ethnic and occupational selectivity, migration was also selective according to educational qualifications (see Table 16). The comparison between the grade completion of permanent Inuvik migrants and return-migrants reveals some significant contrasts. A higher percentage of permanent migrants had attained Grades X-XII. than return-migrants. The contrast is especially striking between permanent migrants and migrants who returned to Aklavik after the construction phase. Twenty-four per cent of permanent Inuvik migrants had completed Grades X-XII compared with 6.4 per cent of Aklavik return-migrants between 1955-61. Twenty-nine per cent of these return-migrants had not completed any grades at school. For migrants who moved to Inuvik during the period 1962-74, the proportion who had completed Grades X-XII was much higher, again indicating the type of educational qualifications required in Inuvik during the second period. Of those remaining in Inuvik, 23 migrants had gone on to further training whilst only 3 of those returning to Aklavik had done any further training.

Factors Influencing Migration

Migration between the two settlements resulted from the interplay of "push" factors at the place of origin and "pull" factors at the destination. Migration theories usually also consider the effect of intervening opportunities between the origin and the destination, but in the case of Aklavik and Inuvik there are no intervening opportunities except distance to affect migration. An additional variable influencing migration is the migrant's personal characteristics and motivations, which affect his assessment of the "push-pull" factors at the origin and destination. As Lee (1966) points out, the migrant's perception of these

TABLE 16

GRADES COMPLETED FOR MIGRANT POPULATION

Grade Completed	Migrants Who Moved to Inuvik 1955-61 and Returned to Aklavik 1955-61		Migrants Who Moved to Inuvik 1955-61 and Returned 1962-74		Migrants Who Moved and Returned 1962-74		Total Return-Migrants		Permanent Inuvik Migrants	
	Number	%	Number	%	Number	%	Number	%	Number	%
0	9	29.0	2	14.3	2	14.3	13	22.0	16	20.2
1 - 6	14	45.2	4	28.6	2	14.3	20	33.9	27	34.2
7 - 9	6	19.4	5	35.7	4	28.6	15	25.5	17	21.5
10-12	2	6.4	3	21.4	6	42.8	11	18.6	19	24.1
TOTAL	31	100	14	100	14	100	59	100	79	100
									(Unknown	17)
Further Training			1	7.1	2	14.3	3	5.1	23	23.9

SOURCE: Interviews in Aklavik and Inuvik, 1974.

factors associated with the area of origin, the area of destination, and the intervening obstacles (including distance) are vital in determining his propensity to move. "The decision to migrate . . . is never completely rational and for some persons the rational component is much less than the irrational" (p. 51).

Motivations of Migrants

Seventy per cent of the total reasons for migration referred to economic/employment factors as the major influences encouraging migration to Inuvik, (including three responses citing the reason: "parents moved for employment"). Other reasons included "health" reasons--11.3 per cent, "educational" reasons--5.7 per cent; "government closure of Reindeer Station"--5.7 per cent; and "social" reasons--7.5 per cent. (See Appendix I for further analysis and breakdown of reasons given for migration.)

The motivations for return-migration were dominated by "social" reasons and by the availability of country food (Appendix J). The migration of people back to Aklavik was related to the characteristics of the migrants themselves as well as to the local labour market conditions in Inuvik. Forty-four per cent of the reasons cited referred to the wish to be with family and friends in Aklavik or to "personal" reasons for moving back. Twenty per cent referred to the easier availability of food as the major reason for moving back, and 8 per cent referred to business reasons. All these responses were concerned with the "pull" of Aklavik, but other responses were negative ones resulting from perceived "push" factors in Inuvik. Eight per cent "hated Inuvik," 12 per cent disliked the amount of drinking in the settlement and 4 per cent of the responses referred to the completion of a job in Inuvik as the "push" factor.

Factors Favouring Migration to Inuvik

By far the most important group of factors affecting migration between Aklavik and Inuvik related to the economic conditions in the two settlements. The type and availability of employment in both Aklavik and Inuvik influenced the migrants' decision-making processes. The availability of employment in Inuvik for unskilled workers during the construction phase acted as a major attractive force encouraging people to move to the new town. Later, employment was available in other occupational categories, which selected other migrants from Aklavik. This "pull" factor was probably much stronger than the "push" factor in Aklavik, which was related to declining fur prices and lack of other employment possibilities.

In Aklavik the lack of employment possibilities did act as a repellent force. Aklavik's wage economy was very unstable and subject to fluctuations over both the long- and short-term. Resource harvesting is subject to cyclical fluctuations in fur-bearing animals and to fur price changes. The permanent employment opportunities in the settlement were extremely limited during the period 1962-74 and in 1967 Makale indicated that only 71 persons were employed permanently out of a total population of 618 persons. In December 1966, 103 persons were unemployed (ibid.) and throughout the whole period heavy reliance was made on social assistance payments. In 1966 Smith estimated the average native *per capita* income in Aklavik from employment to be $274, and the average *per capita* income from all sources to be $644. By 1973, the estimated per capita income from all sources was $941 (Gemini North, 1974) compared to the average for the Mackenzie District of $1,734. Most of the increase was due to the availability of short-term employment with high wages in oil and gas exploration.

The government exercised almost total control over the economy of the settlement during this period. Government was the major source of employment in Aklavik and also supported incomes through social assistance payments, as revealed in Table 17.

The amounts of social assistance decreased in the 1965-66 and 1966-67 period, but the community continued to be dependent on the various government departments and the overall economy of the community did not improve. The apparent decline in social assistance expenditures between 1965-67 was mainly due to the transfer of expenditures from one governmental activity to another (Makale, 1967). The government was responsible for almost all native wage employment. It operated the sawmill, the logging program, and the handicrafts and fur garment projects. The fur garment industry employed approximately fifteen full-time and part-time workers. The project was initiated in 1959 and became a cooperative in 1962. In terms of both employment and production the fur garment cooperative made a significant contribution to the local economy. Twenty-five seasonal workers were employed in the logging and sawmill project in Aklavik, which was in operation until the late summer of 1966, but was then moved to Arctic Red River. A tannery provided employment for five persons in 1966, but was subsequently closed. By far the largest source of employment was casual employment, and in 1966 Bissett indicated that 38.9 per cent of all household heads in Aklavik relied on this type of employment to supplement subsistence

TABLE 17

SOCIAL ASSISTANCE PAYMENTS 1961-74 FOR AKLAVIK

1961-62	1962-63	1963-64[a]	1964-65	1965-66	1966-67[b]	1968-69	1969-70	1970-71	1971-72	1972-73[c]	1973-74[d]
23,556	20,406	29,584	65,636	55,974	44,061	46,718	47,753	51,118	52,454	50,817	62,641

SOURCES: [a] Figures from 1961-64 from Bissett (1967)

[b] Figures from 1964-67 from Makale _et al_. (1967)

[c] Figures from 1968-73 from Gemini North, (1974)

[d] Figures from 1973-74 from Social Welfare Records in Inuvik.

activities and social assistance payments.

> Construction projects, casual labour, winter works programs, all induce a certain complacency among resident groups, who fail to realize the shortcomings of an existence based on fluctuating incomes supplemented by seasonal resource harvesting activities. (Bissett, 1967, p. 143)

Apart from the "pull" of employment in Inuvik, and the "push" generated by lack of employment in Aklavik, the relative abundance and quality of facilities in Inuvik compared to Aklavik was a factor encouraging migration to Inuvik and discouraging some migrants from returning to Aklavik. Nearly a third of the responses cited for migration to Inuvik referred to the availability of superior facilities and a wider range of choice as a major attraction of Inuvik (see Appendix K).

Recreational facilities in Inuvik surpass those in Aklavik with a wide range of activities and a large number of voluntary associations. In 1968 Mailhot recorded 48 voluntary associations active in 1965, representing community recreational, athletic, religious, economic, and educational interests. The number and variety of shops in Inuvik is also superior to Aklavik, and so are the transportation facilities. Having become accustomed to better facilities, many Inuvik migrants were reluctant to return to the more primitive facilities provided by Aklavik. These facilities in Inuvik also attract temporary migrants from Aklavik for shopping, liquor purchases, curling, bingo and other recreational activities.

Inuvik is at a comparative advantage to Aklavik in terms of educational facilities, with residential schools providing education up to Grade XII. In Aklavik during the greater part of this period school facilities were completely inadequate and even unsafe for the accommodation of teachers and pupils (Bissett, 1967). A new school was not completed until 1969. In addition, until 1973-74 Aklavik only offered Grades I-VIII, (Grade IX was added in the 1973-74 school year), and parents therefore had to send their children to school in Inuvik for Grades IX-XII. Some parents disliked the idea of their children being away from home in a residential school for the greater part of the year, and therefore preferred to remain in Inuvik themselves, so that their children could remain at home.

Many of the facilities in Aklavik were left in a substandard state during the early part of this period because the government did not wish to invest in new services in a settlement that they thought would eventually be abandoned (Heinke, 1974). At first housing improvements were not being pushed forward, and as late as 1966, thirty-eight houses in Aklavik were in need of replacement. This represented 36 per cent of the houses in the Mackenzie Delta which required replacing (Bissett, 1967). In addition, of the fifty-five acceptable houses in Aklavik, twenty-three of these were overcrowded according to Makale (1967). Seventy-five per cent of the population were living in non-acceptable housing for structural or overcrowding reasons. The remaining 25 per cent of the population were mainly civil servants living in government housing (ibid.).

Eades (1971) suggested that it was the lack of accommodation rather than the lack of employment in the late 1960s which prevented people from moving back to Aklavik. He cites ten to twelve families then living in Inuvik who would have liked to return to Aklavik but were unable to do so because of the shortage of housing. Both quantity, and quality of housing were therefore additional factors preventing migration back to Aklavik in some cases. Between 1971-74, thirty new three-bedroom houses were built in Aklavik, but these were all allocated to residents of Aklavik whose houses were in substandard condition, or overcrowded, and were not available for former Aklavik residents living in Inuvik.

The availability of health facilities was an important factor favouring migration to Inuvik in a small number of cases. A one hundred bed hospital with five doctors and two dentists was available in Inuvik during this period. In Aklavik prior to 1965 a small frame structure served as the nursing station, but in 1965 a new station was erected. No doctor was stationed in Aklavik, but two nurses served the community. Other facilities and services were not renovated until the mid-1960s either. A new R.C.M.P. detachment and a new Hudson's Bay Company store were provided in the middle of the decade.

Factors Favouring Migration to Aklavik

The decline of unskilled labouring jobs at the close of the construction period was one factor favouring migration back to Aklavik of forty-five of the people who had been involved in the construction of Inuvik. It was also fundamental in explaining the smaller number of migrants who moved to Inuvik from Aklavik between 1962-74. As pointed out earlier, a factor which prevented many Aklavik residents from finding employment permanently in Inuvik, particularly during the second period, was their lack of educational qualifications. Though the level of formal education is now much greater among young settlement natives, they still lack the education required for economic success, their technical training has been minimal, and they are therefore unqualified for most jobs in Inuvik. In 1967, Smith (1971) reported that Aklavik residents in the 18-30 years age group showed a marked degree of age-grade retardation. Most were two to five years behind the level of achievement of their counterparts in southern Canada. "Late school entry, grade failures, and interrupted schooling accounts for most of the age-grade retardation observed in this category"[3](*ibid*.). For those completing secondary education, direct entrance to the employment system is seldom possible because further training is usually required and as Smith points out those who go on to further training have a "moderately high drop-out rate" (*ibid*.).

In 1968-69 the Department of Indian Affairs and Northern Development (D.I.A.N.D.) stated that its policy for Northern employment was to ensure that 75 per cent of all government jobs in the North would be held by northerners by 1978. However, as Lotz points out (1970a), even if all northern natives wished government jobs, D.I.A.N.D. has no control over personnel policies of other government departments, and moreover:

> Even a brief glance at the qualifications needed for positions in the rapidly expanding Northwest Territories government will raise doubts about the validity of the Department's suggestion. All seem to require University graduation, specialized skills and wide experience--all qualifications that few Northerners, and no Northern native peoples possess (p. 279).

The economic significance of hunting, trapping and fishing must not be underestimated as a factor encouraging migration back to Aklavik, and discouraging further movements to Inuvik. Despite the fact that the numbers engaged in full-time trapping had declined drastically over the previous decade, the dependence of a large portion of Aklavik's population on cash and in-kind revenues from traditional resource harvesting activities continued. The availability of alternative and more lucrative sources of employment in Inuvik and elsewhere encouraged many residents to migrate to the new town, and to spend less time in hunting, trapping and fishing activities. However, many migrants who returned to Aklavik cited easier availability of country food as a major reason for their return. Twenty per cent of the responses cited this factor, and it was also the major response to the question concerning the attractions of Aklavik. Thirty-five per cent of the responses indicated that good hunting/fishing and trapping was a major attraction of the settlement (see Appendix L). Several return-migrants stated that living in Aklavik offered much more security than living in Inuvik. In Inuvik good trapping, hunting and fishing areas are a considerable distance from the settlement, and nearly all food has to be bought from the store. In cases of unemployment families may suffer considerable hardship. Return-migrants to Aklavik point out that in Aklavik if a person is unemployed he is at least able to obtain food from the land, and is secure in that respect. As Gemini North (1974) indicates:

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[3] Quoted by permission of the author.

> Given its rich hunting, trapping and fishing resources and the natural beauty of local rivers, mountains, and forests, it is not difficult to understand why Aklavik's population today is the same or higher than it was prior to the creation of Inuvik. (p. 154)

Social considerations were perhaps the most important perceived factors encouraging migration back to Aklavik. A high proportion of people cited this reason as the major one encouraging their return-migration. Kinship ties are particularly strong amongst the native segment of the population, and 36 per cent of the responses referred directly to the wish to be with family and friends as the major contributory factor encouraging them to move back to Aklavik. In addition, a large percentage of the responses to the question concerning migrants' likes of Aklavik referred to social factors. Thirty-one per cent of the responses cited friendliness as a major attraction of Aklavik; a further 23 per cent liked it because it is smaller and quieter than Inuvik. Permanent Inuvik migrants agreed with this assessment of the social attractiveness of Aklavik (See Appendix L).

Most of the hypotheses suggested prior to data collection for permanent migrants were confirmed by field observations. Migration to Inuvik was mainly due to economic/employment factors and during the initial construction phase was selective of white male government employees, and native males and females in the 20-40 years age range. Return-migration to Aklavik was mainly due to "social" factors and to the availability of good hunting/trapping and fishing areas, and again was selective of the younger native age groups, which was not anticipated. It would appear that Inuvik's "pull", particularly in economic terms, rather than Aklavik's "push" was the major factor explaining the net migratory loss of people from Aklavik over the whole period. Aklavik's "pull" operated chiefly in "social" terms (although the availability of country food was also important), and social factors exert a weaker "pull" than economic.

TEMPORARY MOVEMENTS

> Aklavik is most closely linked to Inuvik. This stems partly from the resettlement of Aklavik families in Inuvik, during and following the construction phase in the late 1950s. Scheduled and chartered air flights as well as boat trips and ready communication aids closely link the two communities. Aklavik people go to

> work in Inuvik for varying durations according to the availability of employment. (Bissett, 1967, p. 118)

A major part of the research was concerned with the interrelationships between Aklavik and Inuvik, and the temporary movement of people between the two settlements is one very important aspect illustrating these links. The kinship ties between the two settlements are considerable. Sixty-nine per cent of the permanent Inuvik migrants who were interviewed have relatives still living in Aklavik. In addition 25 per cent of all Aklavik residents have children living in Inuvik. The temporary movement between the two settlements is considerable, and as might be expected the movement from Aklavik to Inuvik is appreciably greater than the movement in the other direction. This is due to the availability of shops, recreational and medical facilities in Inuvik, and to the importance of Inuvik as a social meeting place as well as a stopover en route to other areas.

Questions in the interview related to the number of visits to the other settlement, mode and season of travel, and the reasons for visits. In Aklavik these questions were asked to all Aklavik residents who were interviewed, and not simply to those who had previously lived in Inuvik. In Inuvik the questions were only asked to migrants who had lived in Aklavik. The data are not therefore representative of the total Inuvik population but are biassed towards those residents who had migrated from Aklavik. It seems probable that the volume of temporary movements from Inuvik to Aklavik is dominated by this group since 87 per cent of the reasons given for visiting Aklavik were "to visit family and friends."

Ninety-five per cent (97 people) of all Aklavik residents interviewed visit Inuvik. Only five people stated that they never visit Inuvik and only seven had not visited Inuvik in the last year. Of the five who never visit Inuvik, four were aged over seventy, and one was in the 50-54 years age range. Eighty-eight per cent (85 people) of former Aklavik residents now living in Inuvik visit Aklavik. Eleven people stated that they never visit Aklavik and thirteen had not visited the settlement in the past year. The eleven non-visitors were not concentrated in any particular age-sex, ethnic or occupational group.

The majority of interviewees visited the other settlement only once or twice in the last year (see Table 18). People from Aklavik visit Inuvik more frequently than Inuvik people visit Aklavik. The average number of visits to Aklavik by Inuvik interviewees was three, the average number of visits to Inuvik by Aklavik interviewees was six.

TABLE 18

TOTAL NUMBER OF VISITS TO AKLAVIK AND INUVIK IN THE LAST YEAR

Number of Visits	Inuvik Visitors to Aklavik		Aklavik Visitors to Inuvik	
0	13	13.5%	7	6.8%
1 - 2	40	41.7%	36	34.9%
3 - 9	31	32.3%	42	40.8%
10+	12	12.5%	18	17.5%
TOTAL	96	100	103	100

SOURCE: Inuvik-Aklavik interviews, July-August, 1974.

The vast majority of the visitors spent only one or two days in the other settlement (see Table 19). Aklavik visitors to Inuvik were more likely to spend longer in Inuvik.

TABLE 19

LENGTH OF VISITS

Length of Stay	Inuvik Visitors to Aklavik		Aklavik Visitors to Inuvik	
0	13	13.6%	7	6.8%
1 - 2 days	73	76.0%	73	70.9%
Over 2 days	10	10.4%	23	22.3%
TOTAL	96	100	103	100

SOURCE: Inuvik-Aklavik interviews, July-August, 1974

Aklavik lies thirty-five air miles and eighty river miles from Inuvik. The route by river also acts as the winter road from mid-December until mid-April (see Figure 11). By air the trip takes approximately twenty minutes, and by boat, car and "ski-doo" from two to four hours. The greatest number of visitors between the two settlements used air transport. Visitors from Aklavik to Inuvik were more inclined to use this mode of transportation. Transport by taxi on the winter road between Aklavik and Inuvik was the next most frequent means of travel. Cars and "ski-doos" were the next most used forms of transport, followed by boats (see Table 20). Aklavik visitors to Inuvik were again more inclined to use boats than Inuvik visitors to Aklavik.

Since aircraft was the most frequently used form of transport, statistics were obtained on the number of flights into Aklavik by aircraft. Scheduled flights connect Aklavik with Inuvik five times weekly (Monday to Saturday, excluding Tuesday). The service is provided by a Twin Otter aircraft which has room for eighteen passengers, including a small amount of freight. The fare between Aklavik and

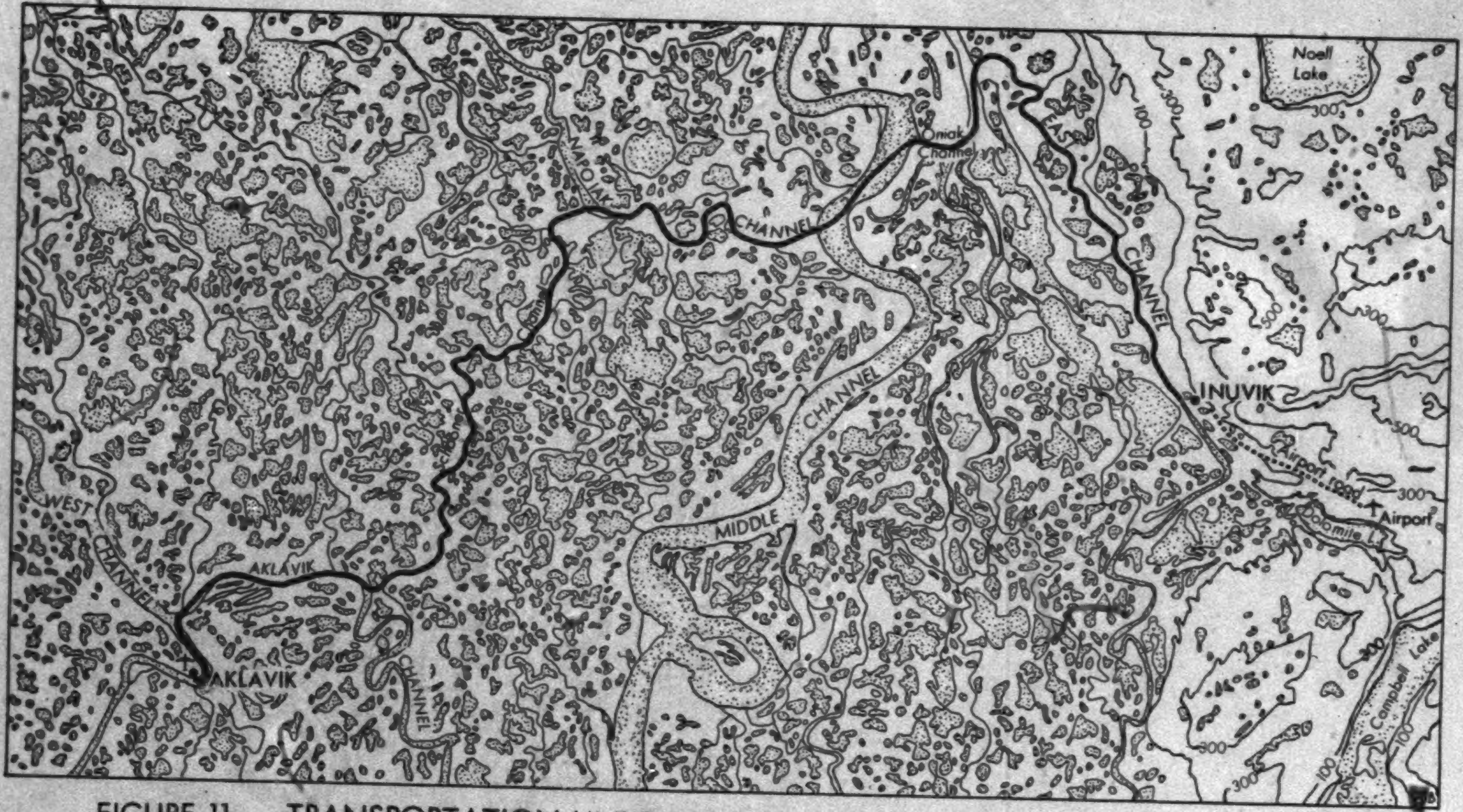
Noell Lake
300
100
500
EAST CHANNEL
Oniak Channel
NAPOIAK CHANNEL
INUVIK
Airport road
Airport
Dolomite L.
Campbell Lake
MIDDLE CHANNEL
WEST CHANNEL
AKLAVIK CHANNEL
AKLAVIK

FIGURE 11 TRANSPORTATION LINKS BETWEEN INUVIK AND AKLAVIK

0 5 10 15 MILES
0 5 10 15 20 25 KILOMETRES
Winter road and river route

After Surveys and Mapping Branch,
Dept. of Mines and Technical Surveys, 107 B

TABLE 20

MODE OF TRAVEL BETWEEN THE TWO SETTLEMENTS

		Taxi		Boat		Airplane		Car/"Ski-Doo"	
Inuvik visitors to Aklavik	Yes	40	41.7%	10	10.4%	53	55.2%	17	17.7%
	No	56	58.3%	86	89.6%	43	44.8%	79	82.3%
	TOTAL	96	100	96	100	96	100	96	100
Aklavik visitors to Inuvik	Yes	46	44.7%	16	15.5%	81	78.6%	16	15.5%
	No	57	55.3%	87	84.5%	22	21.4%	87	84.5%
	TOTAL	103	100	103	100	103	100	103	100

SOURCE: Aklavik-Inuvik interviews, July-August, 1974.

Inuvik was $26.00 return in 1974. By far the most frequently used form of air transport between the settlements is by chartered aircraft. Two charter companies operate between Aklavik and Inuvik--Aklavik Flying Service, which flies Twin Otter Aircraft, and Ram Air which operates smaller aircraft--usually Cesna 185, carrying four passengers. The number of return-flights from Inuvik to Aklavik made by Ram Air for the year August 1973 to July 1974 was as follows:

TABLE 21

RETURN-FLIGHTS INTO AKLAVIK BY RAM AIR, AUGUST 1973-JULY 1974

Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July
138	98	109	53	24	14	30	20	26	74	108	70

SOURCE: Lyle Trimble, Manager, Ram Air

The months June to October are the busiest for the charter companies with as many as nine flights each day into Aklavik by Ram Air. A large percentage of these flights carry liquor from Inuvik to Aklavik. In 1974 it cost from $52.50 to $56.00 to charter a plane one-way from Inuvik to Aklavik, which is a considerable sum of money when considering the incomes of most Aklavik residents. However, as Wacko (1973) indicates:

> . . . in the North there exists an "affluent poor." The reference is to native people who have considerable "disposable income" being spent on alcoholic beverages, since these incomes are not being spent on food, education, recreation, or material things which are usually considered necessities by non-natives. (p. 8)

Aklavik Flying Service operate an average of three flights each day into Aklavik with a peak of twelve flights in one day,[4] and therefore the connections between Inuvik and Aklavik are substantial. Most of the charter air travel takes place during the summer months, and yet most of the movement between the two settlements takes place in the winter. It must be concluded that the winter road serves as the chief transportation link in the winter months.

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[4] Pers. Comm. R.M. Hill, Manager, Inuvik Research Lab.

The winter is the season when most visits are made between the two settlements and a greater number and proportion of Aklavik residents visit Inuvik in this season (Table 22). This is the season in which the winter road is in operation from mid-December to mid-April for cars and "ski-doos" and for taxis, and air transport is also available. The one-way taxi fare between Inuvik and Aklavik is $75.00 and often several people will share this cost to lower the amount for each person. Summer is the next most popular season for travel between the two settlements, and again a larger percentage of Aklavik residents visit Inuvik in summer than Inuvik residents visit Aklavik. Spring follows closely behind summer in number of visits between the two settlements. The late spring and early summer is the time when the muskrat season ends and many trappers, particularly from Aklavik, may visit Inuvik to buy store goods and to celebrate the end of the muskrat season. This probably explains the larger percentage of Aklavik residents who visit Inuvik during the spring and summer rather than vice versa (see Table 22).

A question on the interview asked whether Aklavik residents visited Inuvik more frequently in the last few years than when it was first established, and Inuvik residents were asked whether they visited Aklavik more frequently in the last few years than when they first moved to Inuvik. Thirty-five per cent of Aklavik interviewees

TABLE 22

SEASON OF VISITS

		Winter		Spring		Summer		Fall	
Inuvik residents to Aklavik	Yes	69	71.9%	32	33.3%	33	34.4%	19	19.8%
	No	27	28.1%	64	66.7%	63	65.6%	77	80.2%
	TOTAL	96	100	96	100	96	100	96	100
Aklavik visitors to Inuvik	Yes	81	78.6%	52	50.5%	54	52.4%	33	32.0%
	No	22	22.4%	51	49.5%	49	47.6%	70	68.0%
	TOTAL	103	100	103	100	103	100	103	100

SOURCE: Aklavik-Inuvik interviews, July-August, 1974.

visited Inuvik more frequently in the last few years than when it was first established. About the same percentage visited it the same number of times and the remainder of Aklavik interviewees visited it less. For Inuvik migrants 36 per cent visited Aklavik less than when they first moved to Inuvik. Twenty-eight per cent visited it more, and the remainder visited it about the same number of times each year.

The most frequently cited reason for visiting the other settlement more frequently was the availability of a winter road in the last four years to connect the two settlements, kept open by local government or by oil companies. For Inuvik residents the most frequently cited reason for not visiting Aklavik as often in recent years as when they first moved to Inuvik was that they had lost contact with people in Aklavik.

The response "to visit family and friends" was most often given to the question asking for reasons for visits to the other settlement. Eighty-seven per cent of Inuvik interviewees gave this answer, and 10 per cent of the responses gave "business reasons" as the major reasons for visiting Aklavik (see Table 23). Visitors from Aklavik to Inuvik had a much more diverse list of reasons for visiting Inuvik. The most important reason was to "visit family and friends." Over half the reasons cited this factor. Shopping and liquor purchases were the next most important reasons. Business reasons were cited as the third most important reason, followed by "health," "bingo," "stopover en route elsewhere," "funeral," and "holiday."

In terms of the selectivity of visitors between the two settlements, the number of visits in terms of age, sex, ethnic and marital status group is more important than the selectivity of visitors and

TABLE 23

REASONS FOR VISIT
(more than one possible)

	Inuvik Visitors to Aklavik Number	%	Aklavik Visitors to Inuvik Number	%
Family/friends	81	87.4	77	53.9
Shopping/liquor purchases	0	0	22	15.4
Business	10	10.2	19	13.2
Curling/bingo	1	1.2	3	2.1
Wedding/funeral	1	1.2	1	0.7
Health	0	0	17	11.9
Stopover	0	0	3	2.1
Holiday	0	0	1	0.7
	93	100	143	100

SOURCE: Interviews in Aklavik-Inuvik, July-August 1974

TABLE 24

NUMBER OF VISITS BY AGE GROUPS

Number of Visits	Age Group of Inuvik Visitors to Aklavik 20-54		55+		Age Group of Aklavik Visitors to Inuvik 20-54		55+	
0	8	10.8%	5	22.7%	2	2.6%	5	19.2%
1 - 3	45	60.8%	17	77.3%	37	48.0%	16	61.6%
4 - 9	9	12.2%	0	0	23	29.9%	2	7.7%
10+	12	16.2%	0	0	15	19.5%	3	11.5%
TOTAL	74	100	22	100	77	100	26	100

SOURCE: Interviews in Inuvik-Aklavik, July-August 1974.

non-visitors. In terms of age structure young people tend to visit the other settlement more frequently than older people (see Table 24). Inuvik residents in the 20-54 years age range visited Aklavik more frequently than residents over fifty-five. None of the residents aged fifty-five and over visited Aklavik more than three times, whilst over a quarter of the 20-54 years age group did visit Aklavik over three times. The selectivity of migration for the younger groups is even more obvious for Aklavik visitors to Inuvik. Half the 20-54 years age group from Aklavik visited Inuvik more than three times compared to less than a fifth of those over fifty-five.

Selectivity according to sex favours a greater number of visits by males to both settlements (see Table 25). Since interviews were biassed towards females this contrast is even more pronounced. For Aklavik visitors to Inuvik the contrast between the number of visits by males and females is greater than for Inuvik visitors to Aklavik. The percentage of males visiting Inuvik more than three times was over twice as large as the percentage of females.

In terms of ethnic selectivity white and Metis residents of the two towns are the most frequent visitors to the other settlement, but Eskimo and Indian visitors provide by far the largest number of visitors, because there are more of them amongst the interviewees (see Table 26). The figures for white and Metis are small, but for both Aklavik and Inuvik they represent the most frequent temporary migrants between the two settlements. In the last year, 25 per cent of the whites and Metis in Inuvik visited Aklavik, and 30 per cent of the whites and Metis in Aklavik visited Inuvik over ten times. Indians have the highest percentage of non-visitors, 17 per cent of

TABLE 25

NUMBER OF VISITS BY SEX

Number of Visits	Sex of Inuvik Visitors to Aklavik				Sex of Aklavik Visitors to Inuvik			
	Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%
0	9	20.5	4	7.7	4	8.1	3	5.6
1 - 3	22	50.0	40	76.9	17	34.7	36	66.7
4 - 9	6	13.6	3	5.8	16	32.7	9	16.6
10+	7	15.9	5	9.6	12	24.5	6	11.1
TOTAL	44	100	52	100	49	100	54	100

SOURCE: Interviews in Inuvik-Aklavik, July-August, 1974.

TABLE 26

NUMBER OF VISITS BY ETHNIC ORIGIN

Number of Visits	Inuvik Visitors to Aklavik						Aklavik Visitors to Inuvik					
	Indian		Eskimo		Metis & White		Indian		Eskimo		Metis & White	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	5	16.6	6	12.3	2	11.8	5	25.0	0	0	2	6.6
1 - 3	23	76.8	32	65.3	7	41.2	11	55.0	32	60.4	10	33.4
4 - 9	2	6.6	3	6.1	4	23.5	2	10.0	14	26.4	9	30.0
10+	0	0	8	16.3	4	23.5	2	10.0	7	13.2	9	30.0
TOTAL	30	100	49	100	17	100	20	100	53	100	30	100

SOURCE: Interviews in Inuvik-Aklavik, July-August, 1974.

Inuvik Indians did not visit Aklavik in the last year, and 25 per cent of the Aklavik Indians did not visit Inuvik. The largest number of visitors to Inuvik and Aklavik are of Eskimo ethnic origin, and most of these visited the other settlement one to three times in the last year.

In terms of marital status single people in Inuvik were the most frequent visitors to Aklavik--35.3 per cent visited it more than ten times in the last year, whilst only 10 per cent of the married residents visited Aklavik over ten times. In Aklavik the reverse situation existed. Married residents tended to be over-represented in the category of visitors who visited Inuvik over ten times in the last year (see Table 27). The high percentage of single people from Inuvik visiting Aklavik over ten times is probably due to the large number of people with families left in Aklavik whom they visit frequently. As noted previously 25 per cent of Aklavik interviewees had children in Inuvik.

Pupils from Aklavik are also involved in temporary movements to Inuvik. As pointed out earlier, until 1973-74 pupils from Aklavik had to go to Inuvik for Grades IX-XII but in the 1973-74 year, Grade IX was added to Moose Kerr School in Aklavik. Pupils still had to go to Inuvik if they wished to continue with Grades X-XII. Two hostels are in operation in Inuvik at present although there is some discussion amongst Department of Education officials which may lead to the closure of one of the hostels. Numbers have dropped in both hostels since higher grades have been offered in some of the smaller settlements. Stringer Hall, the Anglican hostel, had over 300 pupils in 1959, and in 1974 had 83, whilst Grollier Hall, the Roman Catholic hostel, had 240 pupils in 1959 and in 1974 had 80. The hostels continued in

TABLE 27

MARITAL STATUS OF VISITORS

Number of Visits	Inuvik Visitors to Aklavik						Aklavik Visitors to Inuvik					
	Single		Married*		Widowed, Separated, Divorced		Single		Married*		Widowed, Separated, Divorced	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	3	17.7	7	11.5	3	16.7	0	0	2	2.7	5	35.7
1 - 3	6	35.3	43	70.5	13	72.2	8	53.3	37	50.0	8	57.1
4 - 9	2	11.7	5	8.2	2	11.1	6	40.0	19	25.7	0	0
10+	6	35.3	6	9.8	0	0	1	6.7	16	21.6	1	7.2
TOTAL	17	100	61	100	18	100	15	100	74	100	14	100

*Common-law marriages included in this figure.

SOURCE: Interviews in Aklavik-Inuvik, July-August 1974.

operation in the 1973-74 academic year because the government anticipated a rise in the number of pupils attaining higher grades from outlying settlements.

TABLE 28

PUPILS FROM AKLAVIK IN RESIDENCE IN INUVIK HOSTELS, 1959-74

Year	Hostel		
	Stringer Hall	Grollier Hall	Total
1959	40	14	54
1960	40	20	60
1961	53	9	62
1962	24	10	34
1963	40	15	55
1964	31	10	41
1965	32	11	43
1966	40	8	48
1967	29	6	35
1968	16	8	24
1969	25	16	41
1970	21	7	28
1971	27	8	35
1972	22	8	30
1973	22	8	30
1974	8	8	16

SOURCE: Hostel records in Inuvik.

Table 28 reveals the number of pupils from Aklavik in the two Inuvik hostels for the period 1959-74. The fluctuations in numbers of pupils from Aklavik at the two hostels appears to be very significant, but in fact the move of one family to Inuvik can result in a drop of ten children at a hostel since pupils with parents living in Inuvik have to live at home. Numbers may increase in one isolated year because parents decide to spend the greater part of the academic year at their camp on the Delta and the children then live in a hostel. The drop in numbers in 1961-62 in Stringer Hall is due to the movement into Inuvik of several families from Aklavik whose children then lived at home. Sixteen to seventeen pupils were expected to enter Grade X in Inuvik in the 1974-75 academic year.

The drop-out rate is high for pupils coming to Inuvik from Aklavik, and the other Delta settlements, with an estimated drop-out rate of 25 per cent in the first month.[5]

It was hypothesized in Chapter I that temporary migration from Aklavik to Inuvik and vice-versa would be mainly for social reasons or for medical care. Eighty-nine per cent of the responses of Inuvik visitors to Aklavik and 57.3 per cent of the responses of Aklavik visitors to Inuvik cited "social reasons." Medical care was not as important a reason for Aklavik visitors to Inuvik as "shopping and liquor purchases," and "business reasons" were the second most frequent responses for Inuvik visitors to Aklavik. It was also hypothesized that temporary movements would not be confined to any particular season but were likely to be concentrated in summer months (due to more pleasant climate in summer, use of river transportation, etc.). However this was not found to be the case. Although movement takes place throughout the year, it was found to be concentrated in the winter months. The reasons for this probably relate to the availability of an inexpensive transportation link--the winter road, and also to the need to offset the long winter darkness with social activities.

It was also hypothesized that seasonal migration would be chiefly from Aklavik to Inuvik in response to job opportunities and would affect males and females in the younger age groups who are unskilled. Although quantitative data are not available to test the reliability of this hypothesis, an examination of the Aklavik Employment Office records reveals that it is true. Many young Aklavik residents were in Inuvik during the summer working on temporary jobs of an unskilled nature.

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[5] Interview with Ron Thody, headmaster, Samuel Hearne School, Inuvik.

The final hypothesis with relation to temporary movements was that permanent residence in Aklavik with the least contact with Inuvik would be predominantly confined to the older residents of Aklavik--former hunters and trappers, mainly of Indian and Eskimo ethnic origin. The number of Aklavik residents who stated that they never visit Inuvik was very small--only five people out of 103 interviewed, but with very limited data the hypothesis appears to be true. Four were over seventy, four native, and four former hunters and trappers.

The links between Aklavik and Inuvik are numerous and diverse in character, and extend beyond mere kinship ties. Permanent migration continues today in both directions, chiefly for economic and social reasons. In addition, temporary movements between the two settlements are both large in number, and varied in terms of the selectivity of visitors, their reasons for moving, length of stay, mode of travel and season of visits to the other settlement.

With a high level of unemployment, a low income per capita, and no visible prospects for material improvements in the economy of Aklavik, it would seem that the trend in future would be for younger people to leave the settlement. This might be particularly true as more young people in Aklavik receive higher levels of education in Inuvik and elsewhere. The employment possibilities in Aklavik are very limited and concentrated in the unskilled manual category. However, in the last few years a large number of temporary casual jobs have been available in the oil and gas exploration industry and it seems likely that this number will increase in the future, especially if a gas pipeline is constructed down the Mackenzie Valley. If this is so, it may be that the population of Aklavik will not be depleted by out-migration in the next few years. Young people may keep Aklavik as their permanent home and move out of the settlement for temporary jobs. This argument is put forward by Gemini North (1974) who suggest that: "Aklavik residents have demonstrated a preference for living in the community and commuting to jobs, rather than moving to Inuvik" (pp. 61-62).

CHAPTER V

DEMOGRAPHIC STRUCTURE OF AKLAVIK

> It is extremely difficult to think of a social or an economic phenomenon, in any part of the world, that is not conditioned by demographic factors. Consumer demand, farm and factory production, the relationship between the supply of and the demand for labour, housing and hospital needs, the construction of highways and of schools, the supply of teachers, dependency of children and the aged, pollution--identify the phenomenon, and it seems to be one that is influenced by the size and the character of population. It comes as a bit of a surprise, then, to discover that so little has been published on the population of the Northwest Territories. . . . (Chang-Mei Lu and D. C. Emerson Mathurin, 1973)

Demographic considerations are basic to almost all future social, economic and political spheres of development in Aklavik. In view of this fact an examination and evaluation of the size and composition of the population, together with demographic trends in the settlement is essential for future planning. Mere numbers of people are important for health and welfare programs, housing developments and recreational requirements as well as for the provision of roads, shops and other municipal services. In addition, the composition of Aklavik's population in terms of age and sex, ethnic origin and marital status is an essential piece of planning information for the provision of schools, the supply of teachers, homes for the aged, and for labour force projections. The dynamic aspects of Aklavik's population must also be examined before plans may be formulated. Fertility, mortality and migration are the three basic components of population change, and the relationship between the rates of change of these three variables determines both the natural increase or decrease of the population and changes in the demographic structure. Since birth rates and death rates are closely related to living standards, levels of economic development, and to the nature of economic activities in the settlement, an examination of these two variables is essential.

POPULATION COMPOSITION

Aklavik's proximity to Inuvik and to recent active oil and gas exploration has encouraged a mobile labour force, accustomed to wage employment, and the total population of Aklavik varies throughout the year as residents travel to Inuvik or elsewhere for jobs. Similarly, short-term and longer-term absences from Aklavik are frequent as residents harvest the natural resources of the Delta. Any de facto census of population is therefore subject to considerable variation depending on the season in which it is conducted. To reduce the possibility of error the census of July-August 1974, was based on several different sources listed in Chapter I. These together provided the most accurate assessment of Aklavik's total population size and the composition of the population.

Age Structure

An examination of Table 29 reveals a high percentage of infants and adolescents in Aklavik compared to the Canadian average. Forty-three per cent of the population is between 0-14 years of age compared to 29.5 per cent of the total Canadian population. This group is both non-productive and non-reproductive, and whilst there has been a tendency for the birth rate to decline in Canada as a whole, the rate remains high in Aklavik, resulting in a large proportion of the population aged between 0-14 years.

TABLE 29

AGE STRUCTURE OF AKLAVIK, 1974, COMPARED WITH CANADA AND THE NORTHWEST TERRITORIES, 1971

Age Group	Aklavik		Northwest Territories		Canada	
	Number	%	Number	%	Number	%
65+	38	5.1	755	2.1	1,744,810	8.1
15 - 64	387	51.9	19,110	55.0	13,442,605	62.4
0 - 14	321	43.0	14,940	42.9	6,380,895	29.5
TOTAL	746	100	34,805	100	21,568,310	100

SOURCE: Aklavik figures from July-August Census, 1974. Figures for the Northwest Territories and Canada, from Statistics Canada, 1971 Census of Canada.

The adult age group, 15-64, is under-represented in Aklavik compared with the Northwest Territories and Canada, due chiefly to out-migration of people in these years. Only slightly over half of the population is in the productive and reproductive age group compared with almost two-thirds in Canada, and 55 per cent in the Northwest Territories.

The percentage of the population in Aklavik aged sixty-five and over is transitional between that of the Northwest Territories and of Canada, and reflects a diminishing death rate in the Mackenzie Delta, whilst the death rate for the Northwest Territories as a whole remains high. The high percentage of people in the older age group in the nation as a whole reflects a low mortality rate, characteristic of the developed world.

The social and economic implications of Aklavik's age structure are considerable. The 0-14 and 65+ age groups are more or less dependent on the middle age group, 15-64, who make up the labour force. The high percentage in the dependent age groups gives rise to both social and economic problems in Aklavik. The dependency ratio[1] is very high, at 1:1.1, compared with 1:1.2 for the Northwest Territories, and 1:1.7 for Canada as a whole. Forty-eight per cent of Aklavik's population is dependent on the productive group, compared to 45 per cent in the Northwest Territories as a whole and 37.6 per cent in Canada.[2] The labour force in Aklavik is provided by only 51.9 per cent of the population, compared with 62.4 per cent of the Canadian population as a whole. A high dependency ratio results in a high rate of expenditure on education for the young, and on medical and hospital care together with pensions and other specialist social services for the aged.

Sex Structure

Although the relative proportions of the two sexes do not vary greatly in Aklavik, the disparity between the sex structure of the two groups is important because of their contrasting economic and social roles in the community. Aklavik has a slightly lower percentage of males than females, with a sex ratio of 97.3 males to 100 females (see Table 30). This compares with a ratio of 116.3 males to 100 females in the Northwest Territories as a whole and 100 males to 100 females in all of Canada.

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[1] Ratio of the under 15 and over 65 age groups to the labour force, 15-64.

[2] These percentages refer to the 0-14 and 65+ age groups. Although it is recognized that not all the 15-64 year olds are economically active, they are taken to represent the labour force on which the other groups are dependent.

TABLE 30

AKLAVIK SEX STRUCTURE COMPARED WITH THE NORTHWEST TERRITORIES AND CANADA

	Aklavik		Northwest Territories		Canada	
	Male	Female	Male	Female	Male	Female
Total	368	378	18,280	16,525	10,795,370	10,772,945
Per Cent	49.3	50.7	52.5	47.5	50.1	49.9
Ratio males: 100 Females	97.3	100	116.3	100(1973)[a]	100	100

SOURCE: Aklavik data from July-August Census, 1974. Northwest Territories and Canadian data from 1971 Census, with the exception of "a" (ratio of males to 100 females for N.W.T.) from *Report on Health Conditions in the N.W.T.*, 1973.

Out-migration of males, particularly in the younger age groups, exceeds female out-migration to account for the lower ratio of males to females in Aklavik. The situation does not yet exist in Aklavik where males live semi-permanently in Inuvik or elsewhere, leaving families behind in Aklavik, although temporarily this situation does arise. Out-migration is in response to economic factors and it is chiefly males who respond to wage employment opportunities in Inuvik and elsewhere. The high ratio of males to females in the Northwest Territories as a whole is explicable by the availability of male-dominated jobs particularly in mining, and exploration. An additional explanation lies in the fact that censuses are usually conducted in the summer when the availability of seasonal employment is highest and temporary movement of single males to the Northwest Territories is the dominant migratory trend.

A comparison of the ratio of males to 100 females in the different age groups in Aklavik, with the Northwest Territories and

Canada reveals some interesting features (see Table 31). In addition, the age-sex pyramids for Aklavik, the Northwest Territories and Canada give additional information about the contrasts in the age and sex composition of the three areas (see Figure 12).

TABLE 31

RATIO OF MALES:100 FEMALES IN THE DIFFERENT AGE GROUPS FOR AKLAVIK, NORTHWEST TERRITORIES AND CANADA

Age Group	Aklavik		Northwest Territories		Canada	
	Male	Female	Male	Female	Male	Female
65+	137.5	100	114.1	100	81.2	100
15 - 64	96.7	100	114.0	100	100.7	100
0 - 14	94.4	100	106.2	100	104.7	100

SOURCE: Aklavik: 1974 Census. N.W.T. and Canada, Government Census, 1971.

Figure 12 indicates that both Aklavik and particularly the Northwest Territories have age pyramids which are wide at the base, revealing high fertility levels, but Aklavik, unlike the Northwest Territories and Canada, has a higher proportion of females in the younger age group. The higher ratio of males to females in the 0-14 years age group for Canada and the Northwest Territories is more "normal" due to the preponderance of male births. The Aklavik age pyramid reveals a decline in fertility in the last four years. However, the high proportion of females in the younger age group is significant since a sharp population increase is likely when this age-cohort moves into the child-bearing phase of life. Aklavik has a higher proportion of people in the age group sixty-five and over, than the Northwest Territories, a fact which is also revealed by the age pyramid. Unlike the Canadian

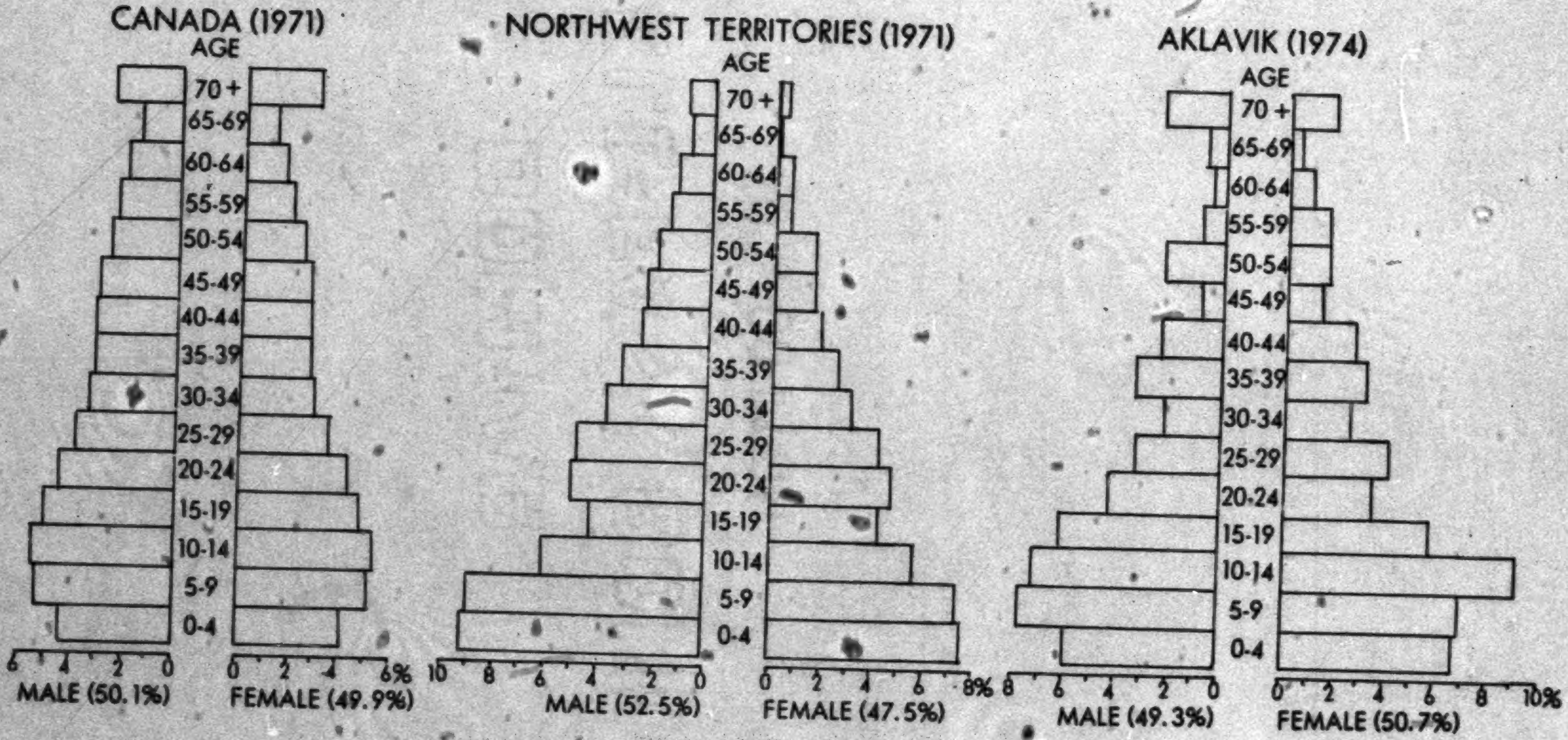

FIGURE 12

AGE-SEX PYRAMIDS FOR CANADA, NORTHWEST TERRITORIES AND AKLAVIK

Source: Government of Canada, Census 1971 and Field data age-sex distribution Aklavik has a much higher ratio of males to females in the over sixty-five age group, though the numbers are small. The ratio of males to females is 137.5 to 100 for Aklavik, and 81.2 to 100 for Canada. Canada's age-sex pyramid reveals both low fertility and low mortality rates and a preponderance of females in the 65+ years age group, indicating the longer life expectancy of females. Due to the age structure of Aklavik with a high percentage of people in the younger age groups, the effects of present high fertility levels will be felt a generation hence. Even if the number of children in each family declines, the absolute number of children will increase.

Ethnicity

Ethnic diversity in Aklavik is important since ethnic differences are associated with demographic variations in fertility, household size and structure, language, religion, occupation, education, marital status and social and economic status.

Distinction is made between five ethnic groups using legal, biological, linguistic and sociological definitions as the differentiating criteria. The five ethnic groups are Indian, Eskimo, Metis, permanent white residents and temporary white residents. The appellations "Eskimo," "Indian," and "Metis" are extremely ambiguous. Legal definitions are employed by the administration, and less rigid social and linguistic definitions by the local people. These two definitions do not coincide, and the Dominion Bureau of Statistics itself employs neither legal nor linguistic criteria in differentiating between ethnic groups. In the census of 1971 each household head was asked "To what ethnic or cultural group did you or your ancestor (on the male side) belong. . . .". This question has not been consistently applied in all censuses. In the earlier censuses (1931, 1941), the question simply stated "racial origin" rather than specifically stating "on the male side," and was therefore subject to various interpretations.

In this study legal definitions are employed to distinguish between Indians and Eskimos, since this is the criterion most commonly used in official censuses, and for comparative purposes it was therefore considered to be the most useful distinguishing criterion in this study. However, the definition is both ambiguous and open to different interpretation by various groups and results in some people who have no Indian blood whatsoever being classified as Indian, and similarly some full-blooded Indians are excluded from the legal status of Indian.

The Indian Act, 1952 (Revised Statutes of Canada, Chapter 149, Sections 11-12) defines an Indian as any person:

1) Considered to "hold, use or enjoy lands and other immovable property belonging to, and appropriated to the use of various tribes, bands or bodies of Indians of Canada" as of 26 May 1874.
2) Who belongs to a band holding such land or property.
3) Who is "a male person who is a direct descendant in the male line of a person" entitled to hold such lands.
4) Who is the legitimate child, wife or widow of a man entitled to hold such lands.
5) Who is the illegitimate child of a woman subject to the Indian Act, so long as the father is not known to be a non-Indian.

Specifically excluded from Indian status are:

1) Enfranchised persons
2) The wife or child of a person not entitled to be registered

3) A person or his descendants allotted "half breed lands or money scrip."

In addition the "aboriginal race . . . known as Eskimos" are specifically excluded from the Act. A full-blooded Indian woman may be excluded if she marries a non-Indian, or becomes enfranchised, and similarly by marriage a non-Indian woman is granted Indian status if she marries an Indian. The Indian Band List dates back to 1929 and full censuses of Indians were taken from 1961, based on the criteria laid down in the Indian Act.

Similar criteria are used to identify Eskimos though no act was passed setting down these criteria, and therefore no legal definition exists for this classification. For purposes of identification all Eskimos were provided with discs stamped with a number at the time of the 1941 Census. Prior to this time enumeration had proved very difficult owing to the lack of uniformity in spelling of names, and the fact that there was no common use of family surnames. In 1945 the North was divided into registration districts and Family Allowances were issued to Eskimos. For ease of administering Family Allowances, and in order to obtain information on population movement, new discs were issued, with a letter and figure identifying the registration district, and a second figure identifying the particular Eskimo. Since 1946 the Eskimo Disc List has been used for administration purposes, but an attempt was made in 1970 to abolish the disc system, and to reestablish the use of surnames. "Project surname" encouraged each Eskimo family to select a surname and to use it consistently, but the project failed and there has been a trend back to the use of disc numbers for identification purposes.

Metis is the most ambiguous of all the ethnic groups. A Metis person is strictly defined as "the offspring of a white father and an Indian Mother" (Gemini North, 1974), though a consensus of people agree that Metis are non-Treaty Indians and unlisted Eskimos (or a mixture of the two), that is, persons of Indian and Eskimo ancestry who are not in the legal position of Indians and Eskimos (Slobodin, 1966). In reality the Mackenzie Delta Metis have no existence legally or administratively. The Metis Association includes "any person of mixed Indian and non-Indian blood" and "any person who is a non-registered Treaty Indian" (that is whose father is not a Treaty Indian).[3] The Dominion Bureau of Statistics does not recognize the separate existence of Metis as such, and no population data relating to birth rates, death rates and natural increase are distinguished. Metis persons may be included in any one of the categories "Indian," "Eskimo," "white" or "other," depending on their residence--whether on an Indian reserve, in an urban area, rural community or elsewhere (Slobodin, 1966). In this study it is thought to be useful to distinguish Metis as a separate ethnic group since they reveal certain unique demographic features which are obscured by their inclusion in one of the other groups, and which distort the characteristics exhibited by the other ethnic groups.

Children were classified as Metis if they had mixed blood as long as their father was not a Treaty Indian, in which case by reference to the Indian Act they were legally classified as Indian. In the case of illegitimate children where the father was unknown, the child was assumed to take the mother's ethnicity.

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[3] This definition would seem to exclude people with mixed Eskimo and white blood but an official from the Metis Association said that such a person would be admitted to the Association since membership is extended to include anyone with some indigenous North American native blood.

"Permanent" white residents were considered to be those who had lived in Aklavik for over one year. "Temporary" residents filling some of the educational, religious, governmental, police and commercial positions in Aklavik, were identified if they had lived in Aklavik for less than one year.

TABLE 32

ETHNIC STRUCTURE OF AKLAVIK IN 1974

Ethnicity	Number	Per Cent of Total Population
Indian	152	20.4
Eskimo	321	43.0
Metis	205	27.5
Permanent White Resident	27	3.6
Temporary White Resident	41	4.5
	746	100

SOURCE: Aklavik Census, 1974.

The dominant ethnic group in Aklavik is Eskimo, followed by Metis, Indian and finally white. In terms of age structure there is a considerable variation between the ethnic groups depending upon differential rates of fertility, mortality and migration (see Tables 32 and 33).

Metis have the highest proportion in the youngest age groups, with over half the population under fifteen years. This reflects the number of mixed ethnic marriages and common-law unions in recent years.

TABLE 33

AGE STRUCTURE (IN PERCENTAGE) FOR INDIVIDUALS IN THE FIVE ETHNIC GROUPS IN AKLAVIK

Age Group	Indian	Eskimo	Metis	Permanent White Resident	Temporary White Resident
65+	9.3	3.1	2.4	22.2	7.4
45-64	8.7	10.8	7.8	7.4	9.5
15-44	39.1	43.4	38.1	48.2	65.9
0-14	42.9	42.7	51.7	22.2	17.2
	100	100	100	100	100

SOURCE: Aklavik Census, 1974

The percentage in this age group is also high for Eskimo and Indian groups, while for temporary whites this group is under represented. The high percentage in the 15-44 years age group for temporary whites is indicative of the in-migration of people in this age group to fill educational, commercial and governmental positions in the community. A very high percentage of permanent white residents are in the over sixty-five age group. The actual number of persons in this group is small (only 9 persons), but these nine people reflect the in-migration of white male trappers who were in the younger age groups in the 1930s and 1940s, and who have remained in the settlement since.

Metis and Indian groups have the highest proportion of dependents, and the lowest proportion of people in the working age group. This contrasts sharply with the temporary white resident group who have a very high percentage in the working age group and a very low dependency ratio (see Table 34).

TABLE 34

DEPENDENCY RATIO AND WORKING AGE GROUP BY ETHNIC STATUS FOR AKLAVIK, 1974

	Dependency Ratio	Labour Force (%)
Indian	1:0.9	47.8
Eskimo	1:1.2	54.2
Metis	1:0.8	45.9
Permanent White Resident	1:1.3	55.6
Temporary White Resident	1:3.1	75.6

SOURCE: Aklavik Census, 1974

The sex structure also reveals some interesting contrasts, largely explicable by selective migration (see Table 35). Only the Metis, Eskimo and temporary white resident groups reveal a fairly normal sex distribution with the proportion of males and females approaching equal. Indians have a much higher proportion of females with the male to 100 female ratio at 67.0 to 100. This disparity is probably accounted for by selective out-migration of Indian males, particularly in the younger adult age bracket.

TABLE 35

SEX STRUCTURE OF THE ETHNIC GROUPS IN AKLAVIK, 1974

Ethnic Group	Males	%	Females	%	Ratio of Males: 100 Females
Indian	61	40.1	91	59.9	67.0 : 100
Eskimo	158	49.2	163	50.8	96.9 : 100
Metis	107	52.5	98	47.8	102.0 : 100
Permanent White Resident	21	77.8	6	22.2	350.0 : 100
Temporary White Resident	21	51.2	20	48.8	105.0 : 100

SOURCE: Aklavik Census, 1974

Table 36 supports the hypothesis that selective out-migration of Indian males, particularly in the younger adult age group, has led to a disparity between the number of Indian males and females. The proportion of males to females in the 15-44 years age bracket is 15.8 per cent to 23.7 per cent.

The examination of migratory trends to Inuvik in the previous two chapters revealed that a high percentage of Indians moved permanently to Inuvik, giving further weight to the above contention. In addition there is a higher proportion of Indian females in the 0-14 years age group.

There are a greater number of Metis males than females in the 15-44 years age bracket. Permanent migration to Inuvik did not affect Metis to the same extent as Indians, and three-quarters of those who moved to Inuvik subsequently returned to Aklavik.

The considerably higher percentage of permanent white male residents rather than females is certainly due to selective in-migration at an earlier period. Many of these in-migrants married native females and their wives are therefore included in other ethnic groups. Others are widowers and appear in the older age group. An almost equal number of males and females migrate temporarily to Aklavik, particularly teaching personnel.[4] Males are predominant in the over sixty-five years age group amongst the temporary white residents, and these men fill the Roman Catholic church positions in the community.

Marital Status

Aklavik has a much higher proportion of people in the "single"

---

[4] Teachers are included in the "temporary" category, since they frequently stay in the settlement for only one academic year.

TABLE 36

AGE-SEX STRUCTURE OF THE ETHNIC GROUPS IN AKLAVIK, 1974

Ethnic	Age Group 0 - 14		15 - 44		45 - 64		65+		TOTAL		
Group	Number	%	Number	%	Number	%	Number	%	Number	%	%
Indian males	28	18.4	24	15.8	5	3.3	4	2.6	61	40.1	100
females	37	24.3	36	23.7	8	5.3	10	6.6	91	59.9	
Eskimo males	73	22.7	66	20.3	15	4.7	5	1.5	158	49.2	100
females	64	19.9	74	23.1	20	6.3	5	1.5	163	50.8	
Metis males	48	23.2	47	23.0	8	4.0	4	2.0	107	52.2	100
females	58	28.2	31	15.1	8	4.0	1	0.5	98	47.8	
Permanent white resident males	4	14.8	9	33.3	2	7.4	6	22.3	21	77.8	100
females	2	7.4	4	14.8	0	0	0	0	6	22.2	
Temporary white resident males	3	7.3	13	31.7	2	4.9	3	7.3	21	51.2	100
females	4	9.8	14	34.1	2	4.9	0	0	20	48.8	

SOURCE: Aklavik Census, 1974

category than Canada as a whole or the Northwest Territories (see Table 37). A greater proportion of the male population is single than the female. Conversely a considerably lower proportion of Aklavik's population is married compared to the Canadian average. Common-law marriages are not recognized by the Dominion Bureau of Statistics and the two individuals are considered to be separate families living in the same household. However, in this study common-law marriages are considered separately because they are so prevalent in Aklavik that inclusion in one of the other categories would distort the data. Common-law unions make up 19.4 per cent of all legal and common-law marriages in Aklavik. The proportion in the widowed category in Aklavik is almost the same as that of Canada as a whole. As might be expected due to the higher male mortality rate, a higher percentage of females in Aklavik are widowed than males.

An examination of Table 38 reveals the age distribution and marital status of Aklavik residents over the age of fifteen years. Table 38 suggests that there is a postponement of marriage until later years in Aklavik. Eighty-four per cent of the 15-24 years age category are single although by the 25-34 years age bracket this proportion has dropped to 39.8 per cent of the total number of people of this age. The highest proportion of married people lie in the 35-44 years age category and the highest percentage of widowed in the sixty-five years and over age group, as might be anticipated. The figures for males and females follow the same general trends and therefore only the total age distribution and marital status has been presented here. However, there is some indication of a greater proportion of married females in the youngest age group considered here (15-24).

TABLE 37

MARITAL STATUS BY SEX IN THE 15+ YEARS AGE GROUPS FOR AKLAVIK (1974) COMPARED WITH CANADA AND THE NORTHWEST TERRITORIES (1971)

Marital Status	Aklavik						Canada	N.W.T.
	Male	%	Female	%	Total	%	Total %	Total %
Single	99	46.8	84	39.4	183	43.1	28.3	32.5
Married	83	39.1	83	38.9	166	39.0	64.4	63.2
Common-law marriages	20	9.4	20	9.4	40	9.4	N/A[a]	N/A[a]
Widowed	6	2.8	21	9.9	27	6.4	6.1	3.3
Separated/ Divorced	4	1.9	5	2.4	9	2.1	1.2	1.0
	212	100	213	100	425	100	100	100

[a] The government census classifies the two individuals in a common-law marriage as single.

SOURCE: Aklavik; Census 1974. Canada and N.W.T. Government Census, 1971.

N/A: not applicable

This fact is significant since the marriage rate and age at marriage, particularly amongst females, should affect the gross number of births. However, a high rate of illegitimacy exists among single native females, and therefore the marriage rate and age at marriage has less influence on fertility than might be expected.

TABLE 38

AGE DISTRIBUTION AND MARITAL STATUS FOR AKLAVIK, 1974
(in percentages)

Marital Status	15-24	25-34	35-44	45-54	55-64	65-69	70+
Single	84.1	39.8	19.0	13.6	4.0	0	10.0
Married	7.6	47.7	67.0	63.7	60.0	37.5	33.3
Common-law	7.6	9.1	14.0	9.1	8.0	12.5	6.7
Widowed	0.7	1.1	0	13.6	24.0	37.5	33.3
Separated/ Divorced	0	2.3	0	0	4.0	12.5	16.7
	100	100	100	100	100	100	100

SOURCE: Aklavik Census, 1974

Table 39 reveals a very high proportion of single temporary white residents, indicative of the mobility of single persons to take up temporary positions in the community. The contrast in terms of marital status is great between temporary and permanent white residents. The vast majority of the permanent whites are married. Metis and Indians have the highest percentage of common-law unions, and all groups except permanent whites have a much higher percentage of single persons than the overall Canadian proportion which is 28.3 per cent.

Out of a total number of 103 legal and common-law marriages, 40 unions are between persons of different ethnic backgrounds, whilst 63 of the unions are between people belonging to the same ethnic group.

Ten of the 40 mixed ethnic unions are between Treaty Indians and Eskimos, which in earlier periods would have been frowned upon by tradition of both groups. Of the common-law unions half are between people of different ethnicity whilst only 36.1 per cent of the marital unions are between people belonging to different ethnic groups. It would appear that there is considerable mixing between people belonging to different ethnic groups and, in contrast to earlier periods, little segregation now exists.

TABLE 39

MARITAL STATUS BY ETHNIC STATUS FOR AKLAVIK (15+ YEARS) IN PERCENTAGES

Marital Status	Indian	Eskimo	Metis	Permanent White Resident	Temporary White Resident
Single	41.5	43.6	43.5	14.3	61.9
Married	33.3	39.6	38.4	66.7	35.2
Common-Law	11.5	7.6	14.1	9.5	0
Widowed	11.4	8.2	2.0	0	0
Separated/ Divorced	2.3	1.0	2.0	9.5	2.9
TOTAL	100	100	100	100	100

SOURCE: Aklavik Census, 1974

Households

There are a total of 145 households in Aklavik, the largest percentage of households having an Eskimo household head (see Table 40). The average number of persons in each household varies from 5.8 in households with a Metis head, to 2.8 in households with a temporary white head. The total average for Aklavik is 5.14 compared with the national average of 3.5 and the Yukon and Northwest Territories average of 4.0 persons in each household (1971 figures). The maximum household size in Aklavik is thirteen persons. Large household size has demonstrably bad effects on individual health, educational attainment and occupational and social mobility, when the limited facilities of "average housing" are kept in mind.

TABLE 40

ETHNICITY OF HOUSEHOLD HEAD

Ethnicity of Head	Number of Household Heads	%	Total Persons in Households	Ethnicity of Residents of Households	Average Number in Each House
Indian	28	19.4	158	152	5.6
Eskimo	58	40.0	324	321	5.3
Metis	29	20.0	169	205	5.8
Permanent White Resident	15	10.3	53	27	3.5
Temporary White Resident	15	10.3	42	41	2.8
	145	100	746	746	5.1

SOURCE: Aklavik Census, 1974

Table 40 reveals that amongst all ethnic groups, except Metis, there are some households in which there are persons of an ethnicity differing from that of the household head. Thirty-six Metis people live in households with a non-Metis head, representing children of mixed ethnic unions in Aklavik. In most cases the household head is male. (77.9 per cent compared to 22.1 per cent of the households with a female head.) A high percentage of the female heads are over seventy years, and an unexpectedly high percentage are also in the 20-29 years age category (see Table 41).

TABLE 41

AGE-SEX OF HOUSEHOLD HEADS

Age Group	Male	%	Female	%
70+	9	7.9	8	25.0
60-69	8	7.1	2	6.2
50-59	21	18.6	5	15.6
40-49	21	18.6	7	21.9
30-39	31	27.4	4	12.5
20-29	23	20.4	6	18.8
	113	100	32	100

SOURCE: Aklavik Census, 1974

There is a great contrast between the rental status of the different ethnic groups. The vast majority of the native population rent their homes--with well over three-quarters of the Indian, Eskimo and Metis groups belonging to this group (see Table 42). This contrasts with the high percentage of permanent whites who own their own homes, which is close to three-quarters of permanent white residents. A high proportion of the temporary white residents live in government-owned accommodation, as might be expected, and the remaining temporary white residents live in property owned by religious or commercial establishments, or the R.C.M.P. Almost two-thirds of all residences are rented. A further 20 per cent are privately owned and of these 39 per cent are owned by permanent white residents of Aklavik.

Birthplace

By far the largest proportion of Aklavik residents were born in Aklavik, or in the Mackenzie Delta (see Table 43). The proportion of

TABLE 42

RENTAL STATUS OF HOUSEHOLD HEAD

Rental Status	Indian		Eskimo		Metis		Permanent White Resident		Temporary White Resident		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Own	3	10.7	9	15.5	6	20.8	11	73.4	0	0	29	20.0
Rent	24	85.7	45	77.6	23	79.2	2	13.3	0	0	94	64.8
Government Property	0	0	1	1.7	0	0	2	13.3	9	60.0	12	8.3
Old Folks Home	1	3.6	3	5.2	0	0	0	0	0	0	4	2.7
Church Property	0	0	0	0	0	0	0	0	1	6.7	1	0.8
R.C.M.P.*	0	0	0	0	0	0	0	0	2	13.3	2	1.3
H.B.C.**	0	0	0	0	0	0	0	0	2	13.3	2	1.3
N.C.P.C.***	0	0	0	0	0	0	0	0	1	6.7	1	0.8
TOTAL	28	100	58	100	29	100	15	100	15	100	145	100

*Royal Canadian Mounted Police

**Hudson's Bay Company

***Northern Canada Power Commission

SOURCE: Aklavik Census, 1974

TABLE 43

BIRTHPLACE BY ETHNIC ORIGIN

Birthplace	Total		Indian		Eskimo		Metis		Permanent White Residents		Temporary White Residents	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Aklavik	484	64.9	103	67.8	223	69.5	155	75.5	3	11.1	0	0
Mackenzie Delta	117	15.6	38	24.9	38	11.9	41	20.0	0	0	0	0
Elsewhere in Arctic or Sub-Arctic	72	9.7	10	6.6	55	17.1	6	3.0	1	3.7	0	0
Elsewhere in Canada	35	4.8	1	0.7	2	0.6	2	1.0	3	11.1	27	66.0
Outside Canada	25	3.3	0	0	0	0	0	0	15	55.6*	10	24.4*
Unknown	13	1.7	0	0	3	0.9	1	0.5	5	18.5	4	9.6
	746	100	152	100	321	100	205	100	27	100	41	100

*These figures include 7 persons from the U.S.A., 8 from Europe outside the U.K., 9 from the U.K., and 1 from Australia.

SOURCE: Aklavik Census, 1974

those born in Aklavik is highest for Metis and non-applicable for temporary white residents. Very few native people were born outside the the Arctic or Subarctic whilst the proportion born outside the area amongst both permanent and temporary white residents is much higher.

Occupation

An examination of Table 44 reveals the occupational status of males and females.

TABLE 44

OCCUPATIONAL STATUS BY SEX

Occupation	Males	%	Females	%	Total	%
Managerial	11	3.0	0	0	11	1.5
Professional/ Technical	14	3.8	19	5.0	33	4.5
Clerical	0	0	4	1.1	4	0.5
Sales	7	1.9	6	1.6	13	1.7
Service/Recreation	11	3.0	21	5.6	33	4.3
Transport/ Communication	1	0.3	0	0	1	0.1
Fishermen/Hunters, etc.	107	29.2	1	0.3	108	14.4
Crafts	3	0.8	12	3.2	15	2.1
Labourers	6	1.6	1	0.3	7	0.9
Pre-School Children	45	12.2	49	13.0	94	12.6
Unemployed	19	5.2	34	9.0	53	7.1
Senior Citizens	12	3.3	11	2.9	23	3.1
School in Aklavik	117	31.8	119	31.5	236	31.8
School in Inuvik	9	2.4	3	0.8	12	1.6
Housewives	0	0	93	24.6	93	12.5
Unknown	6	1.5	5	1.1	10	1.3
	368	100	378	100	746	100

SOURCE: Aklavik Census, 1974

A high percentage of the population is unemployed--7.1 per cent compared with the national average of 6 per cent. The female unemployment rate appears to be much higher than the male, but many of the males who classify themselves as hunters and trappers are unemployed for the major part of the year. Fourteen per cent of the total population classify themselves as hunters/trappers/fishermen, with 14.3 per cent of the total belonging to the male sex. Almost equal proportions of the total population are in the professional/technical category and the service category respectively, with a higher percentage of females in both these groups. The contrast between the occupational categories of the different ethnic groups is considerable, as indicated in Table 45.

The managerial category is dominated by permanent white and Metis residents, and the professional/technical category by temporary white residents followed by Eskimo and permanent white residents. Conversely three occupational categories are dominated by native residents--namely the service/recreational, fishermen/hunters/trappers, and the craft categories. Unemployment is highest amongst the Metis group, at 10.7 per cent and lowest amongst the white residents, with no persons unemployed. For all groups other than white the percentage unemployed is well above the Canadian average. If the unemployment rate were to be calculated at different seasons of the year the rate would increase markedly amongst the native groups during the non-trapping periods.

Education

Quantitative data about education were difficult to obtain due to the impossibility of interviewing every resident and the lack of published data. In addition it proved very difficult to categorize people, particularly in the older age groups, according to grades completed or number of years of formal education. This difficulty was due to the fact that many older residents attended school for a few months in

TABLE 45

OCCUPATION BY ETHNICITY

Occupation	Indian		Eskimo		Metis		Permanent White Resident		Temporary White Resident	
	No.	%	No.	%	No.	%	No.	%	No.	%
Managerial	0	0	0	0	4	2.0	6	22.3	1	2.4
Professional	4	2.6	6	1.9	1	0.5	3	11.1	19	46.4
Clerical	0	0	0	0	3	1.5	1	3.7	0	0
Sales	0	0	5	1.6	4	2.0	1	3.7	0	0
Service	11	7.2	12	3.7	7	3.4	0	0	3	7.3
Transport	0	0	0	0	1	0.5	0	0	2	4.9
Fishermen, etc.	23	15.2	55	17.1	29	14.1	0	0	0	0
Crafts	5	3.2	6	1.9	4	2.0	1	3.7	0	0
Labourers	0	0	4	1.2	1	0.5	0	0	0	0
Unemployed	11	7.2	21	6.6	22	10.7	2	7.4	0	0
Pre-School Children	19	12.5	30	9.3	35	17.1	0	0	0	0
School in Aklavik	46	30.3	116	36.0	71	34.6	3	11.1	7	17.1
School in Inuvik	4	2.6	6	1.9	2	1.0	3	11.1	0	0
Senior Citizens	11	7.3	6	1.9	2	1.0	0	0	0	0
Housewives	18	11.9	48	15.0	18	8.7	4	14.8	0	0
Unknown	0	0	6	1.9	1	0.4	3	11.1	6	14.6
							0	0	3	7.3
	152	100	321	100	205	100	27	100	41	100

SOURCE: Aklavik Census, 1974

several separate years, but never continuously, and never passed specific grades. It was possible to obtain information as to the number of people who had never attended school and the age groups to which they belong (Table 46).

TABLE 46

NUMBER OF PEOPLE (15+ YEARS) WHO HAD NEVER ATTENDED SCHOOL BY AGE GROUP

Years of Age	Number	%
15 - 24	1	1
25 - 34	1	1
35 - 44	19	19.6
45 - 54	24	24.7
55 - 64	22	22.6
65 - 69	5	5.2
70+	25	25.9
	97	100

SOURCE: Aklavik Census, 1974

Sixty-nine people from Aklavik had taken extra courses outside school, the most popular being academic upgrading (17 people), teacher training (13), carpentry (4), and nursing (4).

POPULATION CHANGE, 1955-74

There are three components of population change--fertility, mortality, and migration, and the interrelationship between these three variables affects the growth or decline of population. With such a small population any change in one of these three variables is likely to have a disproportionate effect on the size and structure of the population and for this reason it is extremely difficult to make predictions about future population composition in Aklavik. In addition migration predictions have to be based on other than purely demographic considerations.

Table 47 indicates the upward and downward trends in total population in the community from 1955-74, and clearly reveals the effect of the establishment of Inuvik and the out-migration of people between 1959-61 to the new town.

TABLE 47

POPULATION CHANGE, 1955-74

Year	Population	% Change	Average Annual Increase or Decrease
1955	820		
1959	674	-21.6	-5.4
1961	605	-10.2	-5.1
1966	611	+ 0.9	+0.2
1971	665	+ 8.8	+1.8
1974	746	+12.2	+4.1

Components of Population Change

Fertility--An examination of the crude birth rate and the fertility ratio for Aklavik gives some indication of the growth of population in the settlement (Table 48).

The crude birth rate expresses the number of births each year for every 1,000 persons, and gives a rough idea of fertility trends in Aklavik, but it does not take into account age, sex, or marital composition and it does not reveal differences in the frequency of births between different reproductive age groups. Table 48 reveals that Aklavik's crude birth rate is considerably higher than Canada's, but markedly lower than the Northwest Territories as a whole.

TABLE 48

CRUDE BIRTH RATE

Year	Population	Births	Crude Birth Rate (per 1,000)	3 Year Average	N.W.T. 1971	Canada 1971
1971	655	20	30.1		35.7	16.8
1972	677	15	22.6	24.1		
1973	708	14	19.8			
1974	746					

SOURCE: Aklavik Nursing Station Records

A more appropriate measure of fertility, in view of the concentration of population in the younger age groups in Aklavik is the "crude fertility ratio," which expresses the ratio of the number of children below five years of age in proportion to the number of women of child bearing age (15-44). Since this ratio only takes into account those children surviving and not those actually born, it is less useful as a measure of fertility performance, but very useful as a "dependency" measure.

TABLE 49

CRUDE FERTILITY RATIO

Aklavik:	591.2	(1974)
N.W.T.:	743.4	(1971)
Canada:	390.0	(1971)

SOURCE: Aklavik Census, 1974, and Government Census, 1971.

The crude fertility ratio for Aklavik is considerably higher than for Canada, but below that of the Northwest Territories. The ratio indicates that a relatively small number of women are responsible for bearing and raising a relatively large number of children (Table 49).

Another indirect expression of the effect of high fertility rates is the concentration of the population in the younger age groups. A re-examination of the age pyramid for Aklavik reveals a bulge in population in the 5-19 years age range, with a concentration of males in the 5-14 years age bracket, and of females particularly in the 10-14 years age category. Some decline in the birth rate in the past five years is revealed by the age pyramid.

A more useful measure of fertility performance would be to measure age-specific birth rates--or births to each 1,000 women in particular age groups. However, the total number of births in Aklavik each year is too small for significant age-specific rates to be computed.

A moderately high fertility rate in Aklavik is due to the lack of birth control which is available but not readily used, to the lack of alternative recreational pursuits and to a high illegitimacy rate. The "model" family size in Aklavik would appear to be much higher than that of Canada as a whole, although no absolute numbers can be specified. The average number of people in each household was 5.1 in 1974, but frequently larger families reflect a "northern machismo."

Mortality--Mortality is more stable and predictable than fertility and less prone to fluctuations. The trend in Aklavik, as elsewhere, has been for a declining death rate, particularly the infant mortality rate due to the introduction of medicine, hospital care, improved sanitation, diet and clothing, education and governmental welfare policies. The crude death rate expressed the ratio of the number of deaths in a year to the total population in that year.

TABLE 50

CRUDE DEATH RATE

Year	Population	Deaths	Crude Death Rate	3 Year Average	N.W.T. (1971)	Canada (1971)
1971	665	6	9.0		8.5	7.3
1972	677	6	8.8	8.3		
1973	708	5	7.1			
1974	746					

SOURCE: Inuvik and Aklavik hospital records.

The crude death rate is higher for Aklavik than for Canada, but almost the same as the Northwest Territories. However, the numbers are so small that comparison is difficult and the rate is subject to great fluctuations from year to year (Table 50).

TABLE 51

COMPONENTS OF POPULATION CHANGE

Year	Population	Actual Increase/ Decrease	Natural Increase	Rate	Net Migration
1970	675				
1971	665	-10	+14		-24
1972	677	+12	+ 9	Average 15.9	+ 3
1973	708	+31	+ 9		+22
1974	746	+38			

SOURCE: Aklavik Nursing Station, Inuvik General Hospital Records.

The three year average natural increase rate for Aklavik of 15.9 per 1,000 persons is transitional between the 1971 Canadian rate at 9.5 per 1,000, and the Northwest Territories rate, at 27.2 per 1,000.

In terms of population change due to fertility and mortality, Aklavik appears to be in a transitional stage between the low fertility, low mortality and low rate of increase of Canada as a whole, and the higher fertility and mortality levels of the Northwest Territories, together with a high rate of increase. However, migration is an unknown and highly influential component. Due to the fact that migration is both sex selective, and selective of the reproductive and productive age groups it may have a very great effect on the population structure. To examine present trends and predict into the future would be very misleading and unreliable.

The various concepts of overpopulation, underpopulation and optimum population have no stable or absolute values in time or space, but are related to the demographic characteristics of the population together with the economic development of the community. From an examination of Aklavik's demographic characteristics, it is evident that the community has an unbalanced age structure, with a high percentage of people in the dependent age groups, supported by a labour force which has been depleted by out-migration. The high percentages in the younger age groups will lead to an even greater increase in population when these groups reach reproductive age unless there is considerable out-migration from the settlement. The following chapter examines the social and economic situation in the community, and only by an evaluation of the present availability of employment and level of services in Aklavik, relative to the demographic characteristics examined in the present chapter, will it be possible to determine whether Aklavik is overpopulated at the present time.

CHAPTER VI

SOCIAL, ECONOMIC AND POLITICAL SITUATION IN AKLAVIK, 1974

> During the past two decades the emphasis has moved from defence to social programs, to resource development and then on to ecological problems. Today there is a new requirement for shifting the emphasis towards people programs, but by a smooth adjustment of all programs rather than an abrupt change.
>
> Jean Chretien, March 28, 1972

An examination of the existing social, economic and political situation in Aklavik reveals a number of problems, particularly related to the socio-economic circumstances of the people themselves. In addition the level of services and facilities, infrastructure and general layout of the settlement all require close planning attention.

LAND USE

The existing site plan for Aklavik shows urban development projecting back from the apex of land jutting out into the Mackenzie River (see Plate 1 and Figure 13). There is a great contrast between the haphazard development of the older town near the centre of the apex, with the buildings scattered at random over the area, and the planned residential areas of the past few years to the north and west, where there is some conformity in both housing design and layout. However, the general overall appearance of the settlement is one of sprawl, with buildings ranging from good to extremely poor scattered around the ungravelled and badly maintained roads. With minor

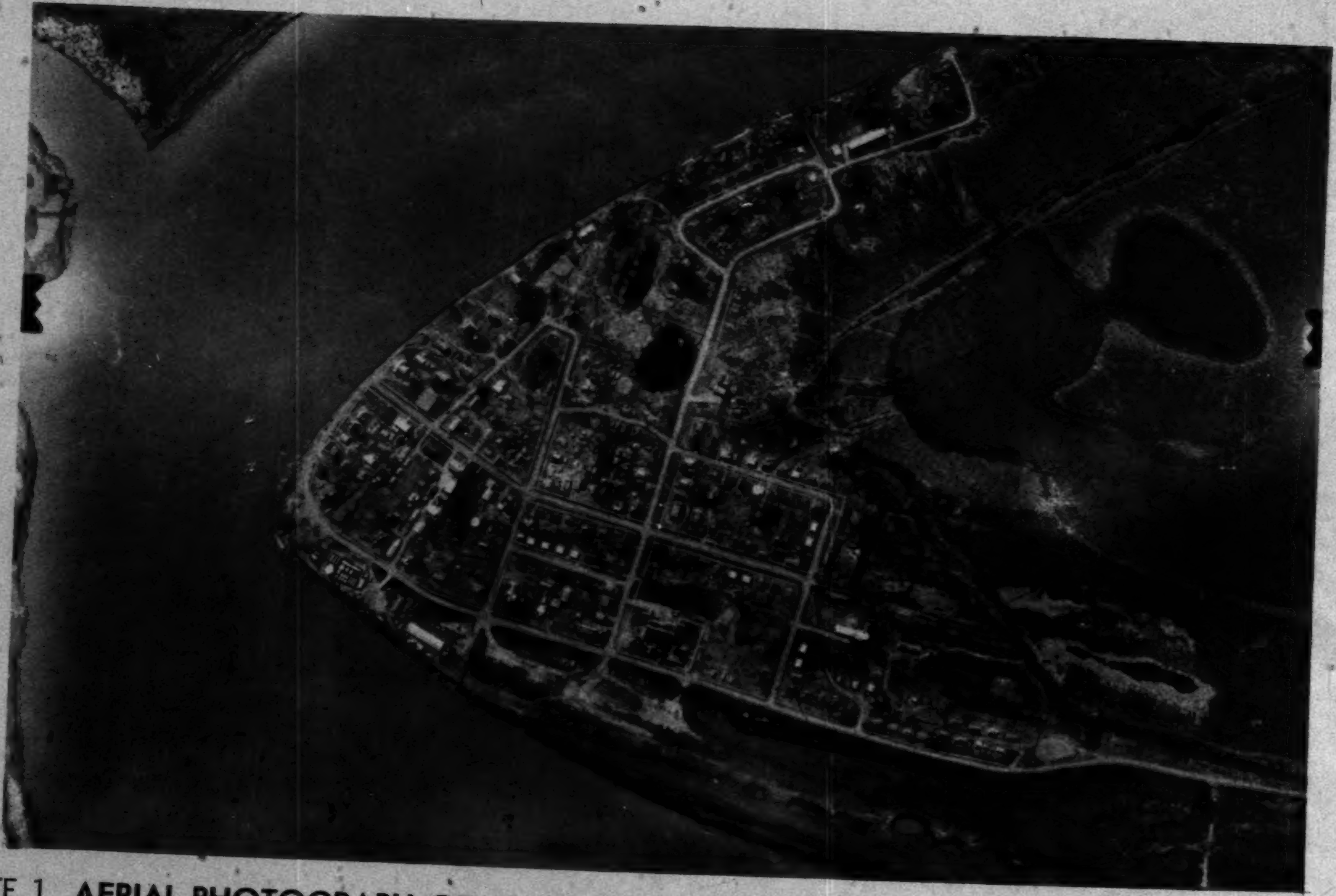

PLATE 1 **AERIAL PHOTOGRAPH OF AKLAVIK** (Source: Energy, Mines and Resources, Photo A23339—24)

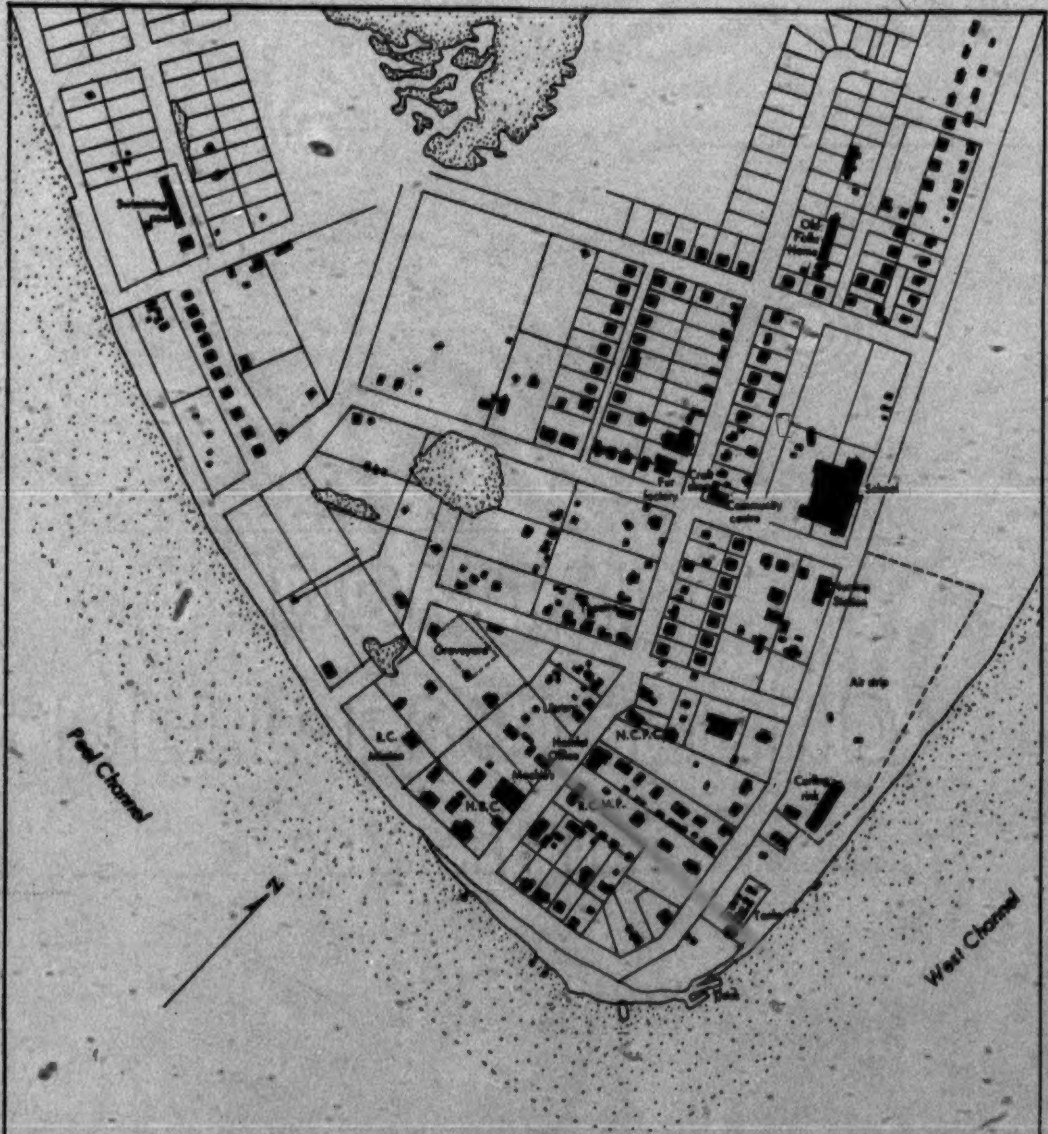
Old Folks Home
Fur factory
Craft shop
Community centre
School
Nursing Station
Air strip
Graveyard
R.C. Mission
H.B.C.
N.C.P.C.
R.C.M.P.
Curling rink
Dock
Peel Channel
West Channel
N

FIGURE 13

TOWN PLAN OF AKLAVIK

1000 0 1000 METRES
5000 0 5000 FEET

Source: Department of Indian Affairs and Northern Development.
Ottawa. Revised to 19-2-73

exceptions little attention has been paid to site conditions, and the whole area is strewn with debris, stagnant ponds, scrap lumber and worn-out articles. The drainage ditches paralleling the roads are full of debris, and the general impression of the settlement is one of neglect and disorder. This is in sharp contrast to the outstanding natural setting of the community, with the Richardson Mountains rising to the west and the Mackenzie River swinging to the north.

The central core area of administrative, communications and commercial functions is located in the lower apex of the townsite. Here the Hudson's Bay Company, Mackie's General Store, the Imperial Oil depot, the administrative buildings and the R.C.M.P. are located. The chief institutional land use area stretches out from the apex along the river bank to the north and west. To the north the Anglican church site,[1] the nursing station and school are located, and to the west the Roman Catholic mission. There is some infilling by residential units between these two zones, and in addition one arm of newer housing stretches out along the river bank to the west of the Roman Catholic mission; another residential area of older housing lies behind the central administrative core, and a further area of mixed old and new housing parallels the river bank to the north beyond the school.

No segregation of housing on an ethnic basis has occurred, but there is a great contrast between the governmental, commercial and institutional housing, chiefly inhabited by temporary white residents, and native housing. A further contrast exists between the new low cost rental homes and the older shack-type housing of native residents.

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[1] The Anglican church was burned down in 1974, but a new church is planned on the same site.

Land distribution within Aklavik is approximately 20 per cent privately owned by residents, 50 per cent owned by the Crown, and the remaining 30 per cent owned by local churches, government administrative agencies, and the R.C.M.P. (Gemini North, 1974).

ADMINISTRATION AND SERVICES

As a result of the decentralization of government activities stemming from the Carrother's Commission Report (1966), Aklavik achieved settlement council status in 1968, and hamlet status on January 1st, 1974. Effectively hamlet status means that an elected council of eight members is responsible for controlling the community's budget, with guidelines from the territorial government. The hamlet council is responsible for the provision of municipal services, including garbage, water supply, sewage and roads, fire protection, air strip maintenance, the setting down of building regulations, and the passing of by-laws in the community.

The composition of the community council from 1968-74 reveals the dominant influence of white residents in the running of the community, out of all proportion to their numbers in the settlement (see Table 52). This is related to the fact that white residents tend to occupy the higher status positions in the community and are more likely to accept leadership. Since councillors are elected, this has the approval of the majority of the settlement residents.

The hamlet employs a secretary manager who is directly responsible to the hamlet council. Territorial government branch offices in Aklavik include Game Management and Social Development and there is also a Department of Public Works and a Housing Association in the community. An employment officer was appointed in 1972, and a recreation director in 1974.

TABLE 52

COMMUNITY COUNCIL COMPOSITION, 1968-74

Ethnic Origin	1968	1969	1970	1971	1972	1973	1974
Native resident	4	4	6	5	4	4	4
Permanent White Resident	3	2	0	2	2	4	3
Temporary White Resident	1	2	2	1	2	0	1
	8	8	8	8	8	8	8

SOURCE: 1968-73 figures from Gemini North, 1974. 1974 figures from field observations.

Police protection is provided by an R.C.M.P. detachment of two officers, and fire protection by a volunteer fire brigade of fifteen men. The nursing station is staffed by three nurses and has beds for five patients, together with X-ray facilities, and the equipment necessary for the treatment of out-patients. The nearest doctors are stationed in Inuvik, though regular clinics are held in Aklavik. In addition there is a community health worker in Aklavik. The community has a small library, which is little used, at least during the summer months, and a flying bank serves the settlement, although Inuvik is used as a banking centre.

Old Folks Home

There is an old folks home run by the Department of Social Development, with twelve private rooms, a lounge and kitchen. Ten people are employed on a rota basis to cook meals and look after the needs of the occupants of the home, and although only four old people were permanently resident in the home in the summer of 1974, the number rises in the winter months. A new ten-suite senior citizens home is planned for 1975, with self-contained units where residents will look after themselves.

Churches

Four churches operate in the community, the two oldest being the Anglican and the Roman Catholic. The Anglican church has the largest congregation, with a regular attendance of about fifty people, and a recorded congregation of much higher than this. The Roman Catholic church draws about twenty to twenty-five members. The Pentecostal church began in the 1950s under the influence of Alaskan Eskimos, and has a congregation of about thirty. Significantly, a high proportion of the permanent native employees are Pentecostal. (Smith, 1971, estimates that over two-thirds of the permanent employees in Aklavik are Pentecostal.) Their rejection of alcohol, and their dependability make them attractive employment prospects. The newest church is the Baptist church which has about ten members.

Municipal Services

Water--At present there are two sources of water for Aklavik--the Peel Channel from which water is trucked to residences in the fall and winter, and Pump Lake, 1,000 feet northwest of Aklavik, from which water is piped during spring break-up, and in the summer months. Each has its own separate water treatment system, though treatment is considered inadequate and requires upgrading (Heinke, 1974). A study was commissioned in July 1972 to evaluate alternatives and make recommendations on a new water supply system for Aklavik. Owing to a lack of government funds the full recommendations of this report cannot be implemented. The report recommended the use of Pump Lake as an all-year-round supply of water, and later Tower Lake was considered to be a better proposition (Figure 14). However, the modified plan envisages the continued use of the Peel Channel during the winter, and the use of Tower Lake, northwest of Pump Lake, for the summer supply.

Sewage--There is no piped sewage system in Aklavik. Most households are supplied with "honey bucket" sewage services. These consist of a garbage can with a green plastic lining, and there is a contract to provide pick-up of the bags every other day. The "honey bags" are usually put out with the garbage and are easily broken. Twenty low cost rental units have pump-out tanks installed, and the governmental and institutional buildings have sewage holding tanks.

Garbage--Garbage is collected weekly under contract, and disposed of approximately half a mile north of the settlement at a garbage dump (Figure 14). However, as Heinke (1974) indicates: "Sewage as well as garbage disposal is uncontrolled. The road to the dump is impassable in the spring, and is lined with refuge of every description." Both the sewage lagoon and the garbage dump are subject to annual flooding after spring break-up, and the waste drains off into the river channels.

Roads--No gravel is available at Aklavik, and the roads are generally constructed on corduroy foundations with a silt covering. The main roads circle the core administrative area, and service the

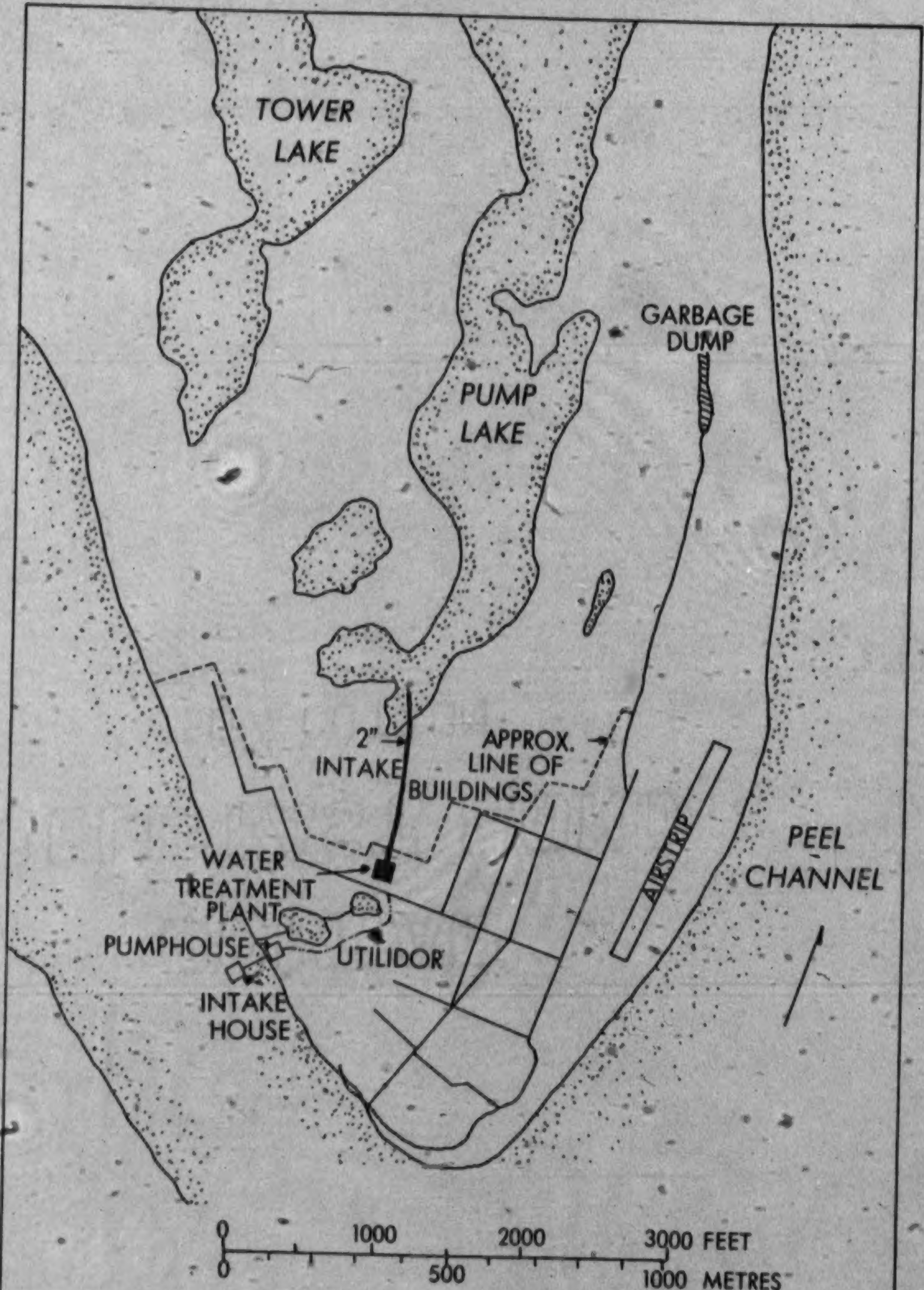
TOWER LAKE
PUMP LAKE
GARBAGE DUMP
2"
INTAKE
APPROX. LINE OF BUILDINGS
AIRSTRIP
PEEL CHANNEL
WATER TREATMENT PLANT
PUMPHOUSE
UTILIDOR
INTAKE HOUSE
0
1000
2000
3000 FEET
0
500
1000 METRES

FIGURE 14 MUNICIPAL SERVICES, AKLAVIK

Source: Heinke, 1974

northeast and western sections of the town. The poor surface drainage in Aklavik results in the roads becoming a quagmire during spring break-up.

Light and Power--Light and power are provided by Northern Canada Power Commission at a domestic rate of 12 cents per kilowatt hour from a power plant in the community. The high price for electricity could only be reduced by hooking up to a grid system from Inuvik, but N.C.P.C. say that this is not feasible at present. All houses in Aklavik are hooked up to the Aklavik plant.

Communications--The major form of communication in Aklavik is person to person contact. A telephone system operated by Canadian National Telecommunications in Inuvik is in operation, but is used mainly by governmental, commercial and institutional households. A weekly newspaper is available by mail subscription from Inuvik, and mail arrives from Edmonton via Inuvik five times weekly. A radio station in Inuvik serves Aklavik and is frequently used to send messages between people in various settlements and in "bush" camps on the Delta. A large proportion of the houses have television, which is received direct from Vancouver, via the Inuvik signal.

Transportation--Within the settlement transportation is mainly in the form of foot traffic using the settlement's two miles of road, wooden sidewalks and trails. In the summer boats and canoes are used for transport, and in winter "ski-doos," dogteams, cars, taxis and trucks use the winter road which follows the river route to Inuvik. One taxi is in operation in Aklavik, and the Northward Airlines agent has a freight and mail delivery contract for air freight within the town. Northern Transportation Company Limited operates a barge service from Hay River approximately once every two weeks, from mid-July to mid-September, with a general cargo rate of $3.24 per cwt. Scheduled and charter air services provide very frequent links between Inuvik and Aklavik (see Chapter IV). The present airstrip is 2,000 feet by 100 feet, made of silt and sand, but there are plans to upgrade the strip on the present site to 3,300 feet. There are no locally based commercial aircraft but there is one private aircraft owned by the Baptist minister in Aklavik.

Education

Eleven teachers and two teaching assistants are employed at Moose Kerr School which offers Grades I to IX. There were 246 pupils enrolled in the school year 1973-74, and 236 in the 1974-75 academic year. The drop in numbers reflects a redistribution of students rather than a decline in numbers, since several students transferred to one of the Inuvik hostels owing to their parents moving out into the "bush."[2]

The high drop-out rate for Aklavik pupils in Inuvik (see Chapter IV) led to the proposal to provide Grades IX and X in the settlement to try to encourage pupils to stay on at school. Grade IX was provided in 1973, but present government policy favours centralization of senior high schools, and there is no prospect for the provision of Grade X in Aklavik in the foreseeable future.

The turnover rate of teachers is high, and particularly so for the 1974-75 academic year, with six new teachers out of a total of eleven. Pupil attendance varies, from over 90 per cent between September and December, with a drop after Christmas, and a noticeable absentee rate in the spring when the muskrat season begins (see Table 53).

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[2] Pers. comm. R. K. Bell, Principal, Moose Kerr School.

TABLE 53

ATTENDANCE RATE AT MOOSE KERR SCHOOL, MARCH-MAY, 1974

Month	Attendance Rate
March	86.02 per cent
April	80.06 per cent
May	61.95 per cent

SOURCE: Pers. Comm. R. K. Bell, Principal,
Moose Kerr School.

In an attempt to reduce the high absentee rate in the latter part of the school year, the school day was lengthened by half an hour during the winter months of 1973-74, and the year ended on May 31st. This policy was highly favoured by community residents since it enabled them to take their children out trapping, and school attendance did improve over previous years, but the territorial government was less enthusiastic. However, the experimental shortening of the school year has been extended to 1974-75 in Aklavik.

An adult education teacher was employed in 1973, and in the 1974-75 academic year sixteen students enrolled in the basic academic upgrading course.

Commercial Enterprises

Two general stores operate in Aklavik--a Hudson's Bay Company Store, and Mackie's General Store. A third shop selling candy is operated by the Imperial Oil agent. Considerable price differences exist between the Hudson's Bay Company store and Mackie's for staple foods, and both stores are considerably more expensive than Inuvik and further south, as might be anticipated due to high freight rates (see Table 54). Table 54 compares the cost differentials between the Hudson's Bay Company and Mackie's stores in Aklavik, and the average of six Edmonton stores. Although similar data were not obtained for Inuvik, Krolewski (1973) computed the food cost differential between Inuvik and Aklavik to be 100:114. The greater cost in Aklavik is due to higher freight costs, and less competition between stores. In addition many foods are unavailable in Aklavik for extended periods, if at all, and these tend to be the foods with the highest nutritional value (for example, milk, fresh vegetables, fruit and eggs). Despite the fact that the majority of the meat and fish are obtained from the land, other staple foods are bought in the store by every native family.

Lower prices for some items in Aklavik relative to Edmonton (e.g. tea, flour, sugar, and lard at the Hudson's Bay Company store in Aklavik, and bacon at Mackie's) reflect either a time lag in higher prices reaching the North, or the fact that these goods were shipped earlier in the season or in the previous season when prices were lower. Large price differences between the Hudson's Bay Company and Mackie's (e.g. apples at 85 cents a pound in the Bay, and 45 cents in Mackie's) reflects a different mode of transportation. Apples in the Bay were brought in by air from Inuvik, those in Mackie's by barge from Hay River.

TABLE 54

COST DIFFERENTIALS BETWEEN HUDSON'S BAY COMPANY AND MACKIE'S STORES IN AKLAVIK, AND SIX EDMONTON STORES (AUGUST-SEPTEMBER, 1974).

Item	Hudson's Bay Company Aklavik ($)	Mackie's Store Aklavik ($)	Average Six Edmonton Stores ($)
Tea (Red Rose 60 bags)	1.05	1.15	1.07
Sugar (10 lbs.)	4.65	5.30	4.69
Flour (10 lbs.)	1.75	1.86	1.79
Butter (lb.)	1.09	1.35	0.95
Jam (48 oz.)	2.70	2.25	2.58
Bread (20 oz.)	0.58	0.70	0.30
Potatoes (lb.)	0.24	0.45	0.15
Oranges (lb.)	0.65	0.60	0.28
Apples (lb.)	0.85	0.45	0.40
Eggs (Dozen)	1.69	1.45	1.49
Oats (Robin Hood, 5 lb.)	1.50	1.65	1.49
Carnation Milk	0.35	0.40	0.33
Rice (lb. Delta)	0.64	0.45	0.49
Lard (Tenderflake)	0.39	0.85	0.50
Malt (2-1/2 lb.)	1.85	--	1.79
Lettuce (lb.)	1.09	--	0.27
Cabbage (lb.)	0.63	0.50	0.17
Bacon (lb.)	1.79	1.45	1.63

SOURCE: Hudson's Bay Company and Mackie's data from field data. Edmonton data from Consumer Affairs, Edmonton. Price averages in six Edmonton stores, September 6th, 1974.

Recreational Facilities

Until 1972 recreational facilities were notably lacking in the settlement, due to higher priorities being given to other sectors including education. However, since 1972 new recreational facilities have been financed through federal government programs, including Local

Initiative Project grants (L.I.P.) in an attempt to provide an alternative to alcohol. A curling rink was provided under an L.I.P. grant and winter activities centre around this activity which is very popular in the community. A swimming pool and skating rink were constructed in 1972. The swimming pool operates during the summer months providing lessons and recreational swimming for children and adults and attendance in 1974 varied between 20 and 118 people each day, with an average of 54 people each day. In 1974 a recreation director was appointed to organize dances, bingos, baseball games, curling, etc. A new community centre was also opened in 1974, offering facilities for table tennis, pool, darts, bingo, television, and dances as well as providing a day care centre and "drop-in" centre. This centre proved very popular during the summer of 1974; bingos were held every two weeks, and dances almost as frequently. Both forms of entertainment were very well attended, and in addition the centre was used each evening as a social meeting place.

No hotel or restaurant was in operation in 1974, the Delta Cafe and Hotel having been condemned as unsanitary in January 1974. In the summer of 1974 a new cafe was under construction, with accommodation for six guests, and in the fall a hotel was scheduled to be built providing self-contained accommodation for a further six guests.

Films were shown in the community centre, and at the Aklavik Theatre and despite the somewhat "dated" nature of some of the films, these were heavily subscribed to. The school offers a range of recreational facilities, and a cross-country skiing program in the winter.

The territorial government will assist any community to provide recreational facilities by providing up to 50 per cent of the capital cost to a maximum of $75,000 over a three year period. The 50 per cent cost provided by the community itself may be in the form of cash, labour, material or equipment. In addition an annual per capita recreational grant of $5.00 is also provided by the government. Aklavik has taken full opportunity of these grants, both to provide more recreational facilities, and to appoint a recreation director.

Housing

> If alcohol abuse is the major social problem in the study region, housing is the major economic one. (Gemini North, 1974)

In 1965, the federal government approved a five year rental housing program designed to offer adequate living accommodation to Eskimos of the Northwest Territories. This was extended to include Indian residents in 1968, and the responsibility for the program was transferred to the territorial government. The Aklavik Housing Association began in 1969 in conjunction with the Northern Rental Housing Program, aiming to provide adequate, reasonably priced and serviced housing for Aklavik residents. Allocation of housing depends upon such factors as size of family, health and existing accommodation.

Prior to 1968, twenty-nine houses were provided in Aklavik under the Northern Rental Housing Program. Five were constructed in 1969-70; fifteen in 1970-71; ten in 1972-73 and five in 1973-74. Housing costs and service charges are heavily subsidized in one form or another to the point where there is little incentive for home ownership. Rents may be as little as $2.00 a month, up to $100 depending on family income levels and number of dependents. This rental includes power and fuel, and a nominal water charge.

Despite this scheme housing remains inadequate in Aklavik, with a high percentage of overcrowded and substandard units and the problems are exacerbated by poor sanitation facilities. Poor housing leads to mental and physical ill-health. Aklavik has a particular shortage of adequate accommodation for young single and married persons, forcing them to remain in overcrowded conditions.

A housing survey completed in October/November 1973, by the Housing Association in Inuvik indicated the following housing conditions in Aklavik: 54 houses were in good repair, 38 were fair, 16 poor and 5 should be condemned. In addition the report estimated the number of houses required in the community in the following five years (see Table 55).

TABLE 55

NEW HOUSES REQUIRED IN AKLAVIK IN 1974, and to 1979

Size of House	Number Required to 1979	Number Required in 1974
1 bedroom	5	5
2 bedroom	5	5
3 bedroom	10	0
4 bedroom	17	17

SOURCE: Housing Survey, October/November 1973. Inuvik Housing Association.

In addition the report revealed that 89 homes required repairs of some sort.

ECONOMIC BASE

Income

The total income from all sources in Aklavik in 1973 was estimated by Gemini North (1974) to be $690,000, with a *per capita*

5

income of $941, compared to the average for the Lower Mackenzie Delta of $1,734, and an estimated national average of $3,990 in 1973 (*ibid*.).

Sources of Income

The major sources of income in Aklavik are wages, salaries, transfer payments (including welfare allowances and pensions), trapping income (including income in-kind), and subsidies. The government, the Aklavik Fur Garment Cooperative, a small private sector, and oil and gas exploration provide the major employment opportunities for Aklavik residents. In addition fur trapping, hunting and fishing still provide important cash and in-kind revenues. Government salaries and wages made up approximately 50 per cent of the total income in 1973, with $347,199 of the $690,000[3] paid out in government salaries and wages (Gemini North, 1974).

People of different ethnic and economic status in Aklavik depend on very different sources of income. The majority of the white residents are fully employed in government or private sector jobs. Many residents, both white and native, rely on seasonal wage employment supplemented by subsidies, social assistance, trapping, and hunting. Others depend totally on government subsidies and income in-kind. Very few young native residents of Aklavik are engaged full-time in wage employment, but casual labouring jobs provide a very important source of income. There is a great contrast both in total income and in its predictability between workers in continuous wage employment and those who engage in seasonal work. People who engage in temporary seasonal employment have highly unstable and unpredictable incomes which prevent them from accumulating savings and investing capital which would foster greater security and economic well-being.

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[3] Including income in-kind.

Transfer income composed of family allowances, old age and disability pensions, and social assistance (welfare) payments, provides a very important source of income for many Aklavik families. Aklavik is very heavily subsidized with white government employees subsidized by northern allowances, housing subsidies and travel allowances, and native residents subsidized by welfare payments and the provision of shelter, power, fuel, water, education and health care either free of charge or at nominal cost.

Four categories of welfare payments exist. Economic assistance payments are paid to people who would normally provide for themselves but are unable to do so because of unemployment or poor trapping and hunting, etc. Other residents receive welfare on health grounds, or for dependent children. (Unwed mothers with no other economic support fall into this category.) The fourth category is supplementary income support for people whose income is insufficient to support themselves and their families.

Gemini North notes that Aklavik indicates an increase in the economic assistance component of welfare from 41 per cent in 1968-69 to 60 per cent in 1972-73, revealing the fact that more people in the settlement who are capable of being employed are relying on welfare. As Smith (1971) points out, many Aklavik residents consider welfare "to be as legitimate a source of income as any other, and exploit it accordingly" (p. 71).

Aklavik's dependence on welfare is higher than other communities in the Delta. Twenty-seven people in a hundred were dependent on welfare in 1972-73 compared with ten in a hundred for the sub-region as a whole (Gemini North, 1974). Several people argue that the welfare system is the main cause of many of the problems in the community, including apathy, alcohol abuse, and indifference to wage employment and traditional resource harvesting activities.

The total social assistance payments from October 1973 to September 1974 inclusive, amounted to $62,641, the peak appearing in the fall and winter months. This is the time of year when winter clothing has to be purchased, and trapping and wage employment are at a low point (see Table 56).

TABLE 56

SOCIAL ASSISTANCE PAYMENTS, OCTOBER 1973-SEPTEMBER 1974 ($)

Month	Payment
October	5,571
November	5,294
December	5,248
January	5,225
February	4,419
March	5,649
April	4,963
May	5,980
June	3,243
July	4,824
August	4,703
September	7,520

SOURCE: Inuvik Social Development Office

The average household social assistance payment for the year was $432, but this average conceals the considerable variations in the distribution between households in the settlement. In addition to social assistance ten people were receiving unemployment insurance in the summer of 1974.[4]

Inequality in the distribution of income is more strongly related to ethnic status than to any other factor in Aklavik. In 1970 Kuo estimated the mean per capita income of residents of the Mackenzie Delta by ethnic status. His analysis lends support to this hypothesis (see Table 57).

TABLE 57

INCOME LEVELS BY ETHNIC STATUS (1970)

Ethnic Group	Mean Per Capita Income (exclusive of income in kind)
Indian	667
Eskimo	840
Metis	1,147
White	3,545

SOURCE: Chun-Yan Kuo: "A Study of Income Distribution in the Mackenzie Delta of Northern Canada," prepared for D.I.A.N.D., Ottawa.

Employment

Trapping, Hunting and Fishing--Trapping, hunting and fishing were once the mainstays of the economy of Aklavik, both in terms of numbers of residents involved and the amount of income in cash and kind received. Now full-time reliance on the land is limited to between two and four persons, and hunting and trapping activities are pursued on a part-time basis for food, cash and recreational purposes. Associated with this trend has been the tendency for trappers to trap closer to the community, and the decline of "specialist" trapping.[5] However, the importance of these activities should not be underestimated in Aklavik, despite the inability of natural resource harvesting alone to provide an adequate income. A report on the socio-economic aspects of the Mackenzie Valley-Northern Yukon Pipelines, in June 1974, suggests that: "In addition to providing food and cash income, just being out on the land seems to fill a psychological and cultural need for the native people."

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[4] Source: Unemployment Insurance Commission, Edmonton.

During the muskrat season nearly 70 per cent of the male labour force goes out trapping or shooting "rats." Whilst there has been a substantial overall decline in the number of fur pelts taken between 1967-73, with a slight rise in the 1973-74 season, the total value of the fur harvest has fluctuated wildly between 1967-74 (see Figure 15). It would appear that there is little correlation between trapping effort and the prices for furs. In the 1972-73 season total income from trapping amounted to $45,849, which was the highest in the region, and represented 13 per cent of Aklavik's total estimated income. In the 1973-74 season, total income from trapping rose to $64,943, an increase largely explained by the rapid rise in fur prices (see Figure 15). The six prime species in terms of quality and value are muskrat, marten, mink, beaver, white fox, and lynx, and fur price

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[5] Wolforth (1971) distinguishes between "specialist" and "non-specialist" trappers. The former require special equipment which may only be used for one high value fur-bearing species, usually found outside the Delta. The non-specialist trapper takes a variety of Delta species, either with minimal equipment, or with equipment which can serve more than one purpose.

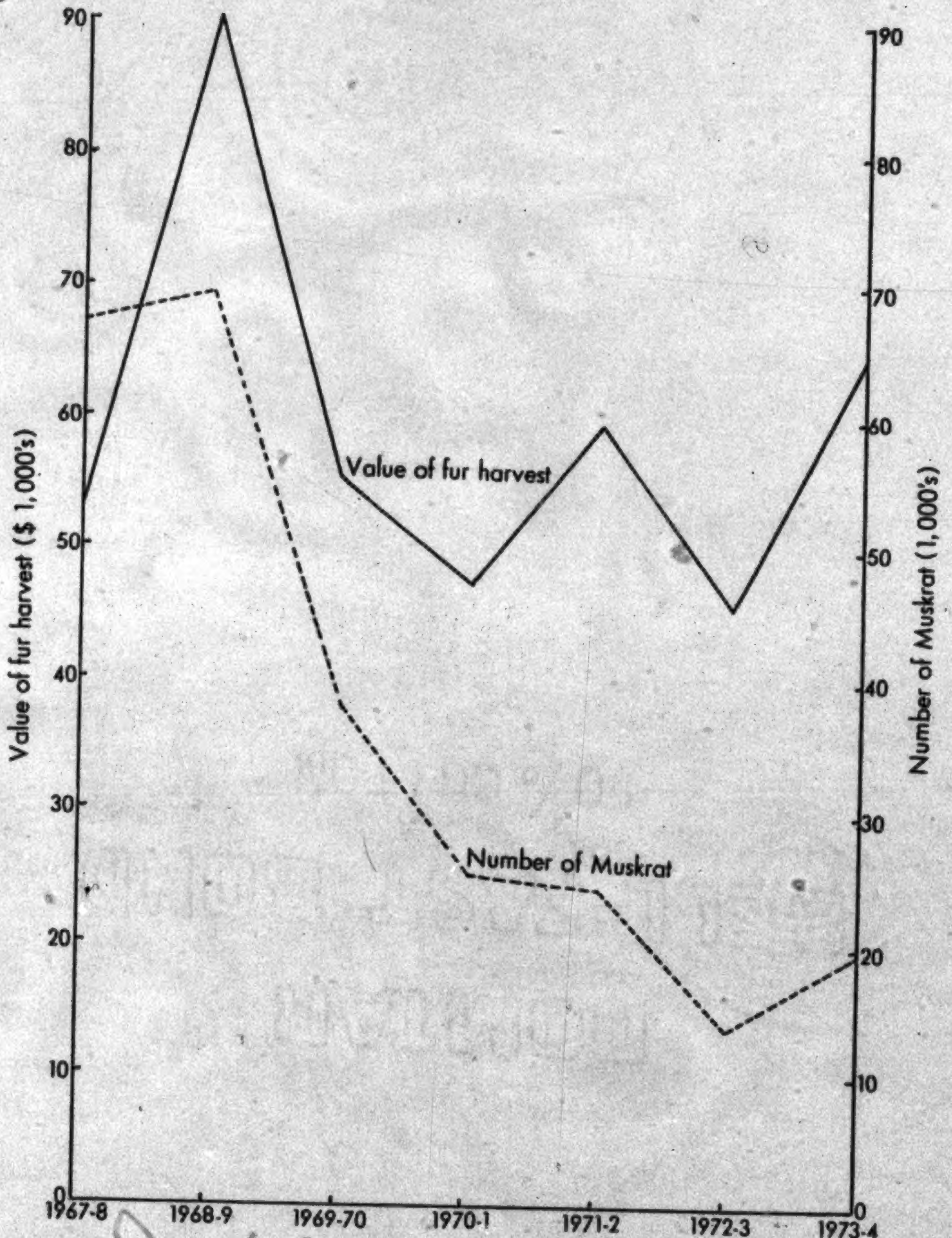

FIGURE 15

TOTAL VALUE OF FUR HARVEST AND NUMBER OF MUSKRAT TAKEN IN AKLAVIK 1967 - 74

Source: Game Management Records Yellowknife, Aklavik rises for these species ranged from 8 per cent to 116 per cent between 1972-73, with a further rise between 1973-74 (Gemini North, 1974). Muskrat is the chief species taken in Aklavik, and a total of 85 out of the 97 hunters, trappers and fishermen who were out in 1973-74 took this species. Figure 16 illustrates the trend to part-time trapping with the majority of trappers taking less than 100 muskrat.

In the 1972-73 year the number of trappers earning over $400 was 43, and in 1973-74 the number increased marginally to 46. The increase in total income between 1972-73 and 1973-74 was not due to the entry of new trappers, but to greater returns to the best trappers in the community (Figure 17). Amongst the most successful trappers are those engaged in full-time employment who trap at weekends or take their holidays during the trapping season. These men have both the motivation to pursue trapping activities in order to increase their cash and kind income, and they also have the money to purchase equipment and supplies. This fact was observed by Gemini North all over the Mackenzie Delta region: "Some of the best trappers in the study region, in terms of effort expended and income earned, are men who are regularly employed in the wage economy."

Four major fur marketing agencies serve the community--the Game Management Office, the Hudson's Bay Company, Mackie's General Store, and Semmler's Store in Inuvik. The Game Management Office will advance up to 75 per cent of the pelt value and ship the furs south where they receive a much higher price at the Edmonton fur auctions than they would locally. The balance of 25 per cent of the fur value is paid from the auction returns. Shipping furs south is by far the most lucrative method of marketing, but a considerably larger number of

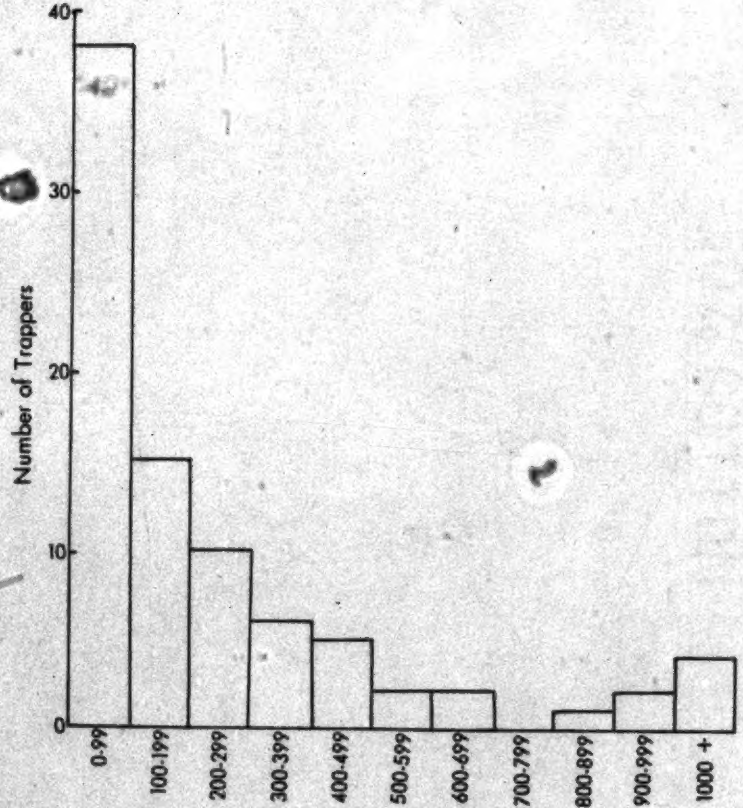

FIGURE 16

MUSKRAT TAKEN BY AKLAVIK TRAPPERS 1973 - 74

Source: Game Management Records, Aklavik

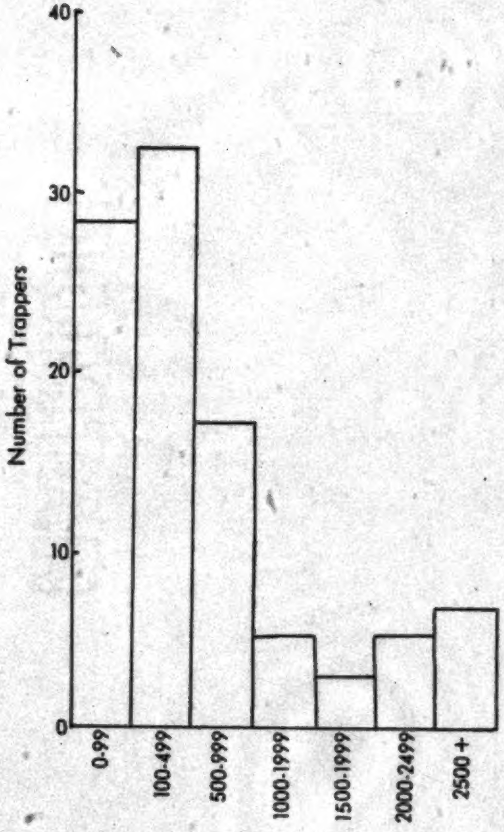

FIGURE 17

INCOME RETURNS FROM TRAPPING IN AKLAVIK 1973 - 74 ($)

Source: Game Management Records Aklavik trappers still sell their furs locally (see Table 58).

TABLE 58

VALUE OF FURS SOLD, 1973-74

Marketing Agency	Income Received
Edmonton Fur Auction	$15,434
Local Fur Traders	$44,254*
Inuvik Fur Traders	$ 5,255
TOTAL	$64,943

*Includes $10,000 worth of furs sold after the new licensing year, but taken in 1973-74 trapping season.

SOURCE: Game Management Records, Aklavik

The Game Management Service report suggests that the reason for the greater use of local marketing services, despite the lower prices paid to trappers is that "the program is not fully understood, and it will be some time before everyone sees the light." However, Gemini North perhaps comes closer to the real reasons: "Traditional ties with market outlets, such as individual free traders, credit advances for goods purchased, and the prospect of immediate payment for pelts are factors affecting a trapper's decision to choose an alternative outlet to fur auctions."

The price of muskrat varies, not only between various marketing agencies, but with the size and quality of the "rat," and whether it is shot or trapped. Trapped muskrat reached as high as $3.45 a pelt at the Edmonton fur auction, in 1974, though the average price was lower than this, and shot "rats" reached upward of $2.00. The average price for all muskrat sold to local fur traders was $2.00. Muskrat are trapped during the winter and shot after spring break-up. Shooting frequently damages individual pelts, but much greater numbers of muskrat can be taken with considerably less effort. (See Figure 18 for an indication of the distribution of winter and spring camps around Aklavik in 1974.)

An even greater number of Aklavik residents depend on part-time hunting and fishing for food, clothing and cash income. About 500 to 600 caribou are taken each year, particularly from the area around Canoe Lake, twenty-five miles northwest of Aklavik. The prices for caribou and moose rose by 50 per cent between 1967-72 (Gemini North, 1974). There is no limit to the number of caribou or moose harvested, and the cost of equipment is considerably lower than for trapping (see Table 59).

TABLE 59

VALUE OF BIG GAME IN AKLAVIK ($)

1967-68	1968-69	1969-70	1970-71	1971-72
42,366	28,786	23,231	22,975	44,193

SOURCE: Gemini North, 1974.

Domestic fishing is very important in the summer and early fall, and the number of fish taken each year is in excess of 100,000 pounds (Game Management Office Records). Fish caught are predominantly whitefish and inconnu, with herring in the fall. Several small commercial enterprises operate in the area, including one commercial operation on the Husky Channel which harvested 4,000 pounds of char in 1973-74 for

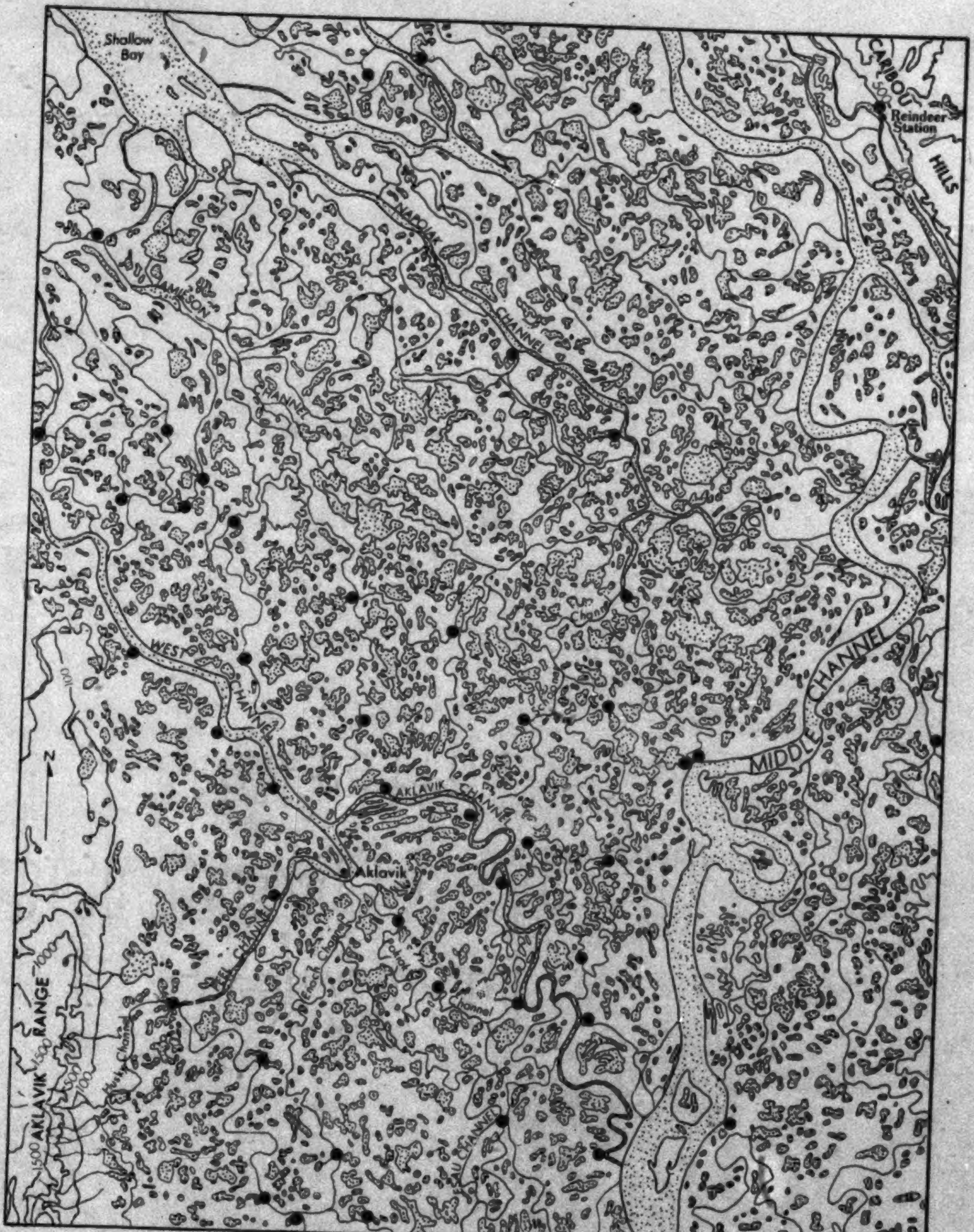
Shallow Bay
CARIBOU
HILLS
Reindeer Station
500
NAPOIAK CHANNEL
JAMIESON
CHANNEL
WEST
CHANNEL
MIDDLE CHANNEL
AKLAVIK CHANNEL
Aklavik
PEEL CHANNEL
AKLAVIK RANGE
N
1500
1000
500

FIGURE 18 DISTRIBUTION OF WINTER AND SPRING CAMPS AROUND AKLAVIK, 1974

0 5 10 15 MILES
0 5 10 15 20 25 KILOMETRES

● Cabins

After: Surveys and Mapping Branch,
Dept. of Mines and Technical Surveys 107 B
Source: Game Management Records, Aklavik

sale in Inuvik. About twenty families go out fishing and whaling in the summer months, and thirty whales were taken in 1974. The total value of fish and wildlife in 1972 was estimated at $87,404 (Gemini North, 1974), with a per capita value of $128.50. The value and share of total income in Aklavik from hunting and trapping is revealed in Table 60.

TABLE 60

VALUE OF FUR, BIG GAME, AND DOMESTIC FISH RESOURCES AND SHARE OF TOTAL INCOME, 1972 IN AKLAVIK

Value of Fur Exports	Value of Big Game	Value of Domestic Fish	Total Value of Big Game, Fur and Fish	Estimated Total Income	% Game, Fur and Fish in: Aklavik	Inuvik
59,809	22,975	4,620	87,404	650,000	13%	2%

SOURCE: Gemini North, 1974

Wage Employment

The trend towards part-time trapping, hunting and fishing activities in Aklavik has been accompanied--indeed partly caused by--the growth of wage employment. Permanent wage employment is limited in the settlement but at present temporary employment is available both in Aklavik itself and in the surrounding region.

Permanent Employment--The major sources of permanent employment in Aklavik are the territorial government, hamlet administration, Hudson's Bay Company, Aklavik Fur Garment Cooperative, and a small private sector, including seven companies engaged in construction, contracting and hauling. The majority of the skilled jobs and professional positions are filled by temporary white residents in Aklavik. The eleven teachers, three nurses, two R.C.M.P. officers, Game

Management officer, church leaders and secretary manager are all of white ethnic origin, and predominantly short-term residents in Aklavik. Permanent native employees are chiefly engaged in unskilled labouring and maintenance jobs, although there are notable exceptions. The game warden, social development officer, employment officer, and housing association official are all native residents, and it seems probable that the proportion of native residents filling the chief administrative positions in the community will increase in future. This is in accordance with the territorial government's policy of giving preference to native residents for jobs.

The Fur Garment Cooperative provides an important source of female employment, and fifteen to twenty local females find employment there. The annual income generated by this industry is $150,000, and outlets include Ottawa, Edmonton, Calgary and Winnipeg stores, as well as smaller centres in the Northwest Territories. A small additional number of women are employed at the craft shop on a piece-work basis rather than an hourly wage. The Hudson's Bay Company employs ten workers, and the old folks home another ten. Additional permanent employment is found at Mackie's store, Imperial Oil, Northward Airlines, the post office, and Northern Canada Power Commission.

Temporary Employment--A large proportion of the Aklavik work force, particularly native male workers, rely on seasonal employment, generally of an unskilled nature. The territorial government, the hamlet, and the oil and gas exploration industry are the chief sources of seasonal employment. The government and hamlet offer short-term construction or maintenance projects which reach a peak in the summer months. In addition finances are given to Aklavik from federal and territorial funds for winter works programs.

In the past few years the oil exploration industry has provided highly paid seasonal employment during the winter months, reaching a peak in February-March. In a report issued by T. D. Conway, Department of Indian Affairs and Northern Development, Calgary, the following seasonal employment statistics for the oil industry were revealed for Aklavik: in 1970-71, 52 men found work, 31 as casual labourers. Fifteen men left for no apparent reason, 9 were laid off, and the remainder completed their assignments. During this season various oil companies paid out $136,700 in wages into the Aklavik area.

In 1972-73, 114 Aklavik men found jobs in the oil industry. The majority (76) were again casual labourers. Thirty-one left for no apparent reason, 6 left to go trapping, and the remainder completed their jobs. The wages paid amounted to $153,100, an increase of 12 per cent. In the 1973-74 season, 56 workers were employed in the industry from Aklavik, 27 of whom completed their jobs and 6 of whom left with no apparent reason. The remainder either left with a reason, or were laid off.[6]

The report reveals the high proportion of Aklavik men dependent on the oil industry for seasonal employment, particularly in the 1972-73 season. It also indicates a major problem in the northern employment situation--the very high turnover of personnel. Summer employment is also available on a smaller scale with the oil industry and in the summer of 1974, eight Aklavik men were employed on the construction of an artificial island for one of the oil companies. These men were offered employment for 90 days with a salary of $6,000.

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[6] Pers. Comm. T. D. Conway, D.I.A.N.D., Calgary.

In summary, the employment situation in Aklavik is extremely unstable. A small proportion of the community is enaged in permanent wage employment, whilst the vast majority engage in temporary, usually highly paid, unskilled occupations. Most of these casual jobs are available outside the settlement, which has encouraged a highly mobile labour force in Aklavik.

SOCIAL WELFARE

Alcohol Abuse

Alcohol abuse is widely recognized as the major social problem in the North, and Aklavik is no exception to this generalization. Alcohol abuse is seen to be a major cause of murders, child neglect, assaults, wife beating, broken homes, absenteeism from work, unemployment, welfare and crime in the Northwest Territories. It is impossible to isolate alcohol problems from housing conditions, recreational facilities, and job opportunities. The Wacko Report on Observations and Recommendations Respecting Alcohol and Drugs in the Northwest Territories, 1973, suggests:

> To many the problem (alcoholism) is of a serious epidemic nature. They note the higher per capita consumption of alcohol than in the Southern provinces; the very high rate of alcohol-related offences, averaging 95 per cent in the Yellowknife Correctional Centre; the high rate of accidental deaths noted by the health authorities; the impression by law enforcement people that their work would be decreased by 75 per cent if it were not for the abuse of alcohol, and the impression by welfare personnel that 98 per cent of child neglect cases were directly correlated to the abuse of alcohol. (p. 3.)

Gemini North (1974) suggests reasons for the high levels of alcohol abuse in the North. Northerners are subject to stress and feelings of deprivation arising from the harsh climate, isolation,

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higher living costs and limited amenities in their communities. They are also at a relative disadvantage compared to temporary "outsiders" in the community in terms of employment opportunities, wage and salary levels, housing and control over community affairs. The frustrations brought about by this state of affairs are temporarily ameliorated by resort to drinking as a form of escapism.

Alcohol has been cited as the major contributory factor in four violent deaths in Aklavik in the last two years, including three in one incident in May 1974. The inquests following these deaths led to six recommendations calling for stricter control of alcohol and firearms, heavy penalties for breeches of the law involving either, and the presence of two R.C.M.P. officers in the community at all times.

No liquor outlet exists in Aklavik, and in a plebiscite held in November 1974, residents voted against having a liquor store in the community. Alcohol has to be obtained from Inuvik, and the usual method is for several residents to join together to charter an aircraft to Inuvik, and to bring back several caseloads of liquor. In the summer liquor is also brought in by river, and in the winter by road. Northern drinking patterns are such that alcohol is usually consumed until it is finished, and almost no "social drinking" patterns prevail in Aklavik. If the supply of liquor is exhausted further bottles are obtained illegally from bootleggers in the settlement, at $20-$25 for one bottle of hard liquor.

Health

With an improved and expanded health care, increased education and improved housing conditions, there has been a great improvement in health conditions in the Northwest Territories. However socio-economic conditions still remain unsatisfactory and these inadequate conditions lead to poor mental and physical ill health. In addition to alcohol abuse there is a very high rate of venereal disease in the Northwest Territories. Gemini North have compiled a list of socio-economic conditions which affect health in northern communities. This is based on information obtained from the Department of National Health and Welfare reports on health conditions in the Northwest Territories. These conditions are all present to a greater or lesser degree in Aklavik (see Table 61).

The problems related to nutrition are particularly noticeable in Aklavik. High food costs together with the non-availability of some foods (e.g. fresh fruit) lead to a reliance on candy, cookies, soft drinks and carbohydrates. This not only has a devastating effect on teeth, but also means that necessary minerals are deficient. Alcohol causes further deterioration in nutritional levels.

It would appear that the present socio-economic structure of Aklavik is very unsatisfactory. The community is almost totally dependent on the government for permanent employment, transfer payments in the form of social assistance, grants and subsidies to support almost every service provided in the community. Seasonal employment is at present available in the oil and gas industry which provides a very important source of income for many Aklavik families, but this is a very unstable source of cash in an unpredictable industry. It would also seem that the present land use pattern calls for considerable consolation of building units and a new town plan. It remains to be examined whether the high level of government support of one kind or another in Aklavik can be justified on social or other grounds, and this will be evaluated in the final chapter.

TABLE 61

SOCIO-ECONOMIC CONDITIONS THAT AFFECT HEALTH CONDITIONS IN THE N.W.T.

Conditions	Effects
Inadequate housing (substandard, overcrowded, poor sanitation)	Pneumonia Enteritis High rates of neonatal mortality due to pneumonia, crib deaths, and accidental inhalation of gastric contents.
Inadequate water supply	Gastro-enteritis Diarrhoea Infectious hepatitis Shigella dysentery
Inadequate waste disposal	Gasto-enteritis Diarrhoea Infectious hepatitis Shigella dysentery
Alcohol abuse	40 to 50 per cent of violent and accidental deaths Gasto-enteritis Mental deterioration
Poor personal hygiene practices	Infectious hepatitis Dysentery
Consumption of raw fish	Fram char--small fish tapeworm From pike--large tapeworm
Consumption of infected black or brown bear meat and walrus	Trichinosis
High birth orders	High infant mortality
Malnutrition	Tuberculosis and other infectious diseases due to reduced protein level. Poor dental health due to high sugar consumption.

SOURCE: Gemini North, 1974. Compiled from Government of Canada, Department of National Health and Welfare, Report on Health Conditions in the Northwest Territories, 1970, 1971, 1972, (Northern Health Service, 1971, 1972, 1973). Gemini North interview with Northern Health Service, Yellowknife and Inuvik, 1973.

CHAPTER VII

CONCLUSIONS

> Native northerners must be given every opportunity to become an equal and participating part of our Canadian society and of an advancing economy. Those who live there must have first claim to northern jobs. If they do not benefit from employment opportunities and if northern development does not become the base for a better and richer life for them as well as for us, we Canadians will have failed in our responsibilities to the North, whatever else we achieve.
>
> Jean Chretien, March, 1972

The whole history of modern development in the Western Arctic has been marked by "boom" and "bust" periods of affluence and poverty. "Boom" periods occurred at the height of the whaling activities, the peak of the fur trade, the building of the DEW line stations and the construction of Inuvik. Each of these periods witnessed great changes in the Western Arctic. The first two periods emphasized the use of land and water-based resources, although at the same time witnessed the emergence of settlements. The latter two initiated a transference of allegiance from the land to wage employment in an urban-based economy.

It was shortly after the peak of whaling activities that Aklavik was established, in 1912, and many Eskimos who had been involved in whaling off the Arctic coast moved south in response to the rise in fur prices. At the same time Kutchin Indians were also drawn towards the Mackenzie Delta from the Peel River area. Located just south of the tree line, Aklavik offered a unique meeting place forIndians and

Eskimos. During the peak of the fur trade in the 1930s and 1940s, many white traders and trappers moved into the settlement, and there emerged a substantial group of Metis residents of mixed ethnic origin. The ethnic heterogeneity of Aklavik's population has remained a distinctive feature of the community. Over the half century in which Eskimos, Metis, Indians and whites have met together in the settlement, many of the former cultural differences have diminished, but the diversity of the population remains a unique characteristic of Aklavik.

During the 1950s many Aklavik residents took advantage of employment possibilities on the DEW line and on the construction of Inuvik. There were insufficient jobs to absorb everyone after the initial construction phase of Inuvik, and the administrative phase of the town provided jobs requiring higher educational qualifications and skills which most Aklavik people did not possess. Many wished to move back to Aklavik because they disliked Inuvik and all that it appeared to represent in terms of a large, impersonal town, expensive food, and alcohol problems. Moreover, social reasons were major considerations since most family and friendship ties were in Aklavik.

The examination of migration trends between Inuvik and Aklavik from 1955-74 lends support to most of the hypotheses which were developed prior to fieldwork. Hypothesis One suggested that permanent migration from Aklavik to Inuvik would be mainly due to economic/ employment factors and initially would be selective of white government males, and young native males and females who worked on the construction of Inuvik and in service jobs respectively. In the administration phase it was suggested that permanent migration would again be selective of the younger age groups educated in Inuvik and would be greater amongst single females than males. The first part of this hypothesis was confirmed by field observations. However, the second part was only partially confirmed. It was not possible to test the sex selectivity of migration due to the bias in interviewing towards female migrants, but permanent migration in the administrative phase was selective of people in the higher status occupational categories, with higher educational qualifications.

Hypothesis Two stated that return-migration to Aklavik would consist mainly of unskilled native workers employed on the construction of Inuvik who were hunters and trappers in Aklavik prior to the move. This hypothesis was confirmed in its entirety. Hypothesis Three stated that temporary migration between Aklavik and Inuvik would be mainly for social reasons or for medical care. Temporary movements would not be confined to any particular season due to the availability of transportation links throughout the year, but it was suggested that movement would be concentrated in the summer months due to the more pleasant climate, availability of river transportation etc. This hypothesis was only partially confirmed by field observations. Social reasons were the dominant motivational factors for temporary movements in both directions, but medical reasons were found to be less important than "shopping and liquor purchases" for visitors from Aklavik to Inuvik, and "business reasons" were the second most important reasons for Inuvik visitors to Aklavik. The suggestion that movements would be chiefly in the summer was rejected, since the frequency of movements was found to be greatest in winter, in both directions.

Hypothesis Four suggested that seasonal migration would be dominated by movements from Aklavik to Inuvik in response to job opportunities and would be selective of unskilled native residents in the younger age groups. An examination of the Aklavik Employment Office records confirmed this hypothesis, although additional field data were not available to test it.

Hypothesis Five stated that permanent residence in Aklavik with the least contact with Inuvik would be confined to older native residents who were formerly hunters and trappers. This hypothesis was confirmed by field observations, although the number of people who never visited Inuvik was extremely small. Hypothesis Six stated that Aklavik's age structure would be unbalanced with above average numbers in the 0-19 years age range, a suggestion which was confirmed by field observations. The final hypothesis suggested that Aklavik would become increasingly native-dominated, whilst Inuvik would become increasingly white-dominated. This trend was certainly confirmed by an examination of population characteristics in both communities. In addition native residents were predominant amongst return-migrants to Aklavik, and permanent migrants to Inuvik were dominated by white residents. In Inuvik in-migration of white residents from the South will further increase the proportion of whites in the community.

The decision to move back to the land after working in Inuvik was much harder than the decision to move into the settlement. The attractions of a secure income, together with other attractions of settlement-living came at a time when fur prices were falling. This led to a decline in the number of "bush" dwellers and in the relative importance of fishing, trapping and hunting as a means of livelihood.

The concept of "dual allegiance" to the land and to the settlement emerged during the 1950s and 1960s (Honigmann, 1965; Vallee, 1967;

Wolforth, 1971). Acceptance of wage employment was considered to be the prime index of acculturation because it was associated with a rejection of traditional resource harvesting activities on the land. In Aklavik the process of acculturation has moved beyond the stage of "dual allegiance" to the land and to the settlement, to a stage in which residents have a greater allegiance to the settlement. However this allegiance has not been expressed in terms of incorporation into the settlement's economy, but at present merely implies permanent residence in the community. The land can no longer support a full-time viable economic activity, but at present neither can the settlement, due to the lack of employment.

The opportunities for full-time wage employment have not kept pace with the supply of native labour in Aklavik. From an examination of Aklavik's demographic characteristics it is evident that the community is overpopulated in relation to the availability of employment and to the level of services within the community itself. For many people permanent out-migration to Inuvik was the solution to the lack of employment possibilities in Aklavik, but migration back to Aklavik has been a significant and unforeseen development. In addition to return-migration, the high percentage of people in the younger age groups will lead to an even greater increase in population when these groups reach reproductive age unless there is considerable out-migration from the settlement, or large scale family planning.

An examination of the employment possibilities and sources of income in Aklavik reveal an overwhelming dependence on government for both permanent and temporary employment, and for transfer income in the form of welfare allowances and pensions. The unemployment rate is high for all ethnic groups except white residents, who make up only 9 per cent of the community's population. The high unemployment rate is concealed to some extent by the large number of people who classify themselves as hunters/trappers and fishermen, but who are in fact unemployed for the vast majority of the year. Only two to four residents are engaged full-time in hunting/trapping and fishing activities, and yet 108 classify themselves as such.

Very few young settlement natives are engaged in full-time wage employment, but casual labouring jobs provide a very important source of income, which is supplemented by welfare payments, and cash and in-kind revenues from part-time traditional resource harvesting.

Aklavik is very heavily subsidized by the government, not only in the form of welfare payments, but in housing subsidies, and the provision of power, fuel, water, education and health care either free of charge or at nominal cost. Aklavik's dependence on welfare is higher than other communities in the Mackenzie Delta, and there has been a rise in the economic assistance component of welfare payments in recent years, revealing that more people in the settlement who are capable of being employed are relying on welfare.

The availability of temporary seasonal jobs provided by the government has induced a certain feeling of complacency amongst Aklavik residents. Jobs are easily attained and therefore not highly valued and there has been a very high turnover of staff in these temporary employment categories.

Another "boom" period of development has just begun in the Mackenzie Delta, with the discovery of large reserves of oil and natural gas in the Delta, the Beaufort Sea and the Arctic Islands.

This has provided a large number of highly paid seasonal jobs for unskilled workers and Aklavik residents have taken full advantage of these developments. If a pipeline is built even more jobs will be available during the winter months on its construction. Arctic Gas estimate that up to 8,000 jobs will be available during the construction period which will lastfor two to three years. However, on completion of the construction of the pipeline, only approximately 200 jobs will be available for its operation. As Wonders (1972) points out:

> While commercial discoveries and exploitation would be highly beneficial for northern resource income, it should be kept in mind that the oil and gas industry is a highly automated one and, following the initial construction phase maintenance personnel would be minimal (p. 143).

Aklavik is off the mainstream of the proposed pipeline development, about forty miles away from the interior route and ten miles away from the coastal route. However, Aklavik's labour force is highly mobile and accustomed to seasonal wage employment, and therefore would be most likely to participate fully in the pipeline construction and in further oil and gas developments in the area.

The probable effects of the pipeline have been indicated by Gemini North (1974). Apart from providing a large number of highly paid seasonal jobs for a few years, and possibly cheaper energy costs:

> The nature and level of development impact associated with the proposed natural gas pipeline may be expected to affect, in one way or another rates of crime, alcohol, housing, welfare, education, health conditions, recreation and racial tension.

If the experience of past "boom" developments can be taken to be indicative of future trends, the construction of the pipeline would provide for a short period of time, full employment, high wages, and a greater range of services and infrastructure in the North, all of which would benefit Aklavik. However, this would be followed by a period of depression with higher unemployment and even greater social and economic problems amongst the native residents.

In order to avoid this situation, definite plans must be implemented now within the settlement itself. Given that Aklavik is at present overpopulated in relation to present levels of economic development and provision of services, there appear to be two planning options. Firstly, to encourage permanent out-migration from the settlement to reduce the population to a size which would permit the community to be economically viable with the present level of employment and services. Secondly, to provide a greater range of services in the community and to encourage small scale employment of a permanent nature, taking into account the training and abilities of the present population and the needs of the community.

1. The first planning option favouring out-migration from Aklavik has been actively tried and up to now has failed for several reasons which were outlined earlier. Out-migration to Inuvik was advocated in the mid-1950s, but both the type and quantity of jobs after the construction phase were insufficient to absorb everyone from Aklavik. Moreover, the government failed to take into account social factors and the migrants' personal preference for living in Aklavik, near good hunting, trapping and fishing areas.

Since that time Jenness (1964, p. 174 f.) and Wolforth (1966, p. 79) have recommended out-migration to the South as a solution to northern employment and poverty, and the Department of Indian Affairs and Northern Development has encouraged greater mobility amongst the native population. Wolforth suggests that such a policy depends upon an educational program which would prepare for easy assimilation into the wider Canadian community, easier and cheaper communications and transport links with the South, and an adult training program related to the employment needs of Canada as a whole rather than those of the North. Education was looked upon as the universal panacea during the 1950s and 1960s, by which native people could get well-paid jobs and either migrate to the South, or return to the North with their newly acquired skills. Smith (1974) contends that the occupational preferences of northern natives do not differ fundamentally from those of white residents. However, despite the higher levels of formal education achieved by young settlement natives which have increased their aspirations for higher status jobs, they still lack the qualifications for administrative and professional jobs. In fact, as Hunt has indicated:

> Some observers contend that the native people's adaptation has been mainly at the aspirational level. They aspire to many of the non-natives economic and social goals, such as higher incomes, better housing, and improved social and health services. But they do not appear to be fully aware of the institutionalized steps leading to the fulfilment of these goals, such as long employment preparation (June, 1974).

In addition, the out-migration policy assumes that native northern residents wish to leave their settlements, and also that they are equipped to take up employment in the South.

With improved communications, changing values, and the achievement of higher levels of education and skills which will equip residents for professional and technical jobs, it is inevitable that some people will leave the settlement and obtain employment elsewhere. This is both desirable and beneficial, since the site of Aklavik cannot accommodate the increase in population which would result without out-migration. In addition, Aklavik can never provide a full range of employment possibilities to cater for everyone. However, many people wish to remain in the settlement, and therefore this policy alone is insufficient, and for many, socially undesirable. As Stucki (1972) has suggested: many observers contend that "people would rather stay in small communities where the people know each other, and have a feeling of belonging to the settlement" (p. 63).

2. It would seem that planning policies should favour the second planning option, whilst supporting the first, and aiding those who wish to leave the settlement. This policy would aim to reduce the high levels of unemployment, the reliance on welfare, and the seasonal pattern of employment which has developed due to the desire of the population to keep Aklavik as their permanent home, but the necessity for them to find temporary employment outside the community because of the lack of employment within the settlement itself. In addition to introducing small-scale employment, upgrading and improving services and infrastructure, additional attempts would be made to reduce the family size, and thus the high dependency ratio, by active family planning programs. In conjunction with these policies some measure of out-migration would be desirable, but in response to permanent rather than temporary employment opportunities.

EMPLOYMENT POSSIBILITIES WITHIN AKLAVIK

The provision of permanent employment in Aklavik must be on a small scale, and related to both the skills of the present population and the needs of the settlement. Since the site of Aklavik presents many problems for expansion, large scale developments are not feasible.

Revitalization of Trapping, Hunting and Fishing on a Part-Time Basis

The revitalization of the trapping, hunting and fishing industry has never entered into government plans since the establishment of Inuvik. Not only has the government assumed that people will gradually be drawn into the wage economy as higher education levels are achieved and traditional resource harvesting becomes relatively less attractive financially, but it has explicitly and implicitly discouraged trapping. Since the mid-1950s government authorities have tried to find alternative sources of income for the native population in the settlements, rather than improving the methods and organization of the trapping industry.

These attempts to provide alternative employment have been laudable and beneficial but have led to a rejection of trapping as a lower status and unworthy pursuit. It is significant that amongst the most successful trappers are those who are engaged in full-time wage employment, and who trap part-time at weekends or holidays. As pointed out previously, these men have both the motivation and the money to purchase equipment, and enjoy trapping as a recreational pursuit. These were also the men who earned between $2,000 and $4,500 in the 1973-74 year, from traditional resource harvesting alone, exclusive of income in-kind. This represents between two and four and one-half times the average per capita income of $941 indicated by Gemini North (1974) for Aklavik residents in 1973. These recreational trappers are also the ones who take advantage of the Game Management Service to ship furs south, where they can obtain a higher price for their pelts.

This is not to suggest that there should be a complete "return to the land," but that trapping could be placed on a more sound financial footing with greater government encouragement. Although trapping muskrats involves considerable preparatory work, shooting muskrat need not compete with full-time wage employment, but may be a part-time recreational pursuit, and one which could also prove to be remunerative. Part-time muskrat shooting need not compete with seasonal employment in the oil and gas industry since the peak period of employment in this industry is February-March, whilst the time for shooting muskrat is May-June.

Various advances are available through the Game Management Service for the purchase of new equipment and these could be extended and more widely advertised. The lack of skills on the part of the younger residents, and the loss of skills of some of the older residents could be improved by community hunts, or through retraining programs. Usher (1971) suggests that: "The inclusion of trapping in the school curriculum can make little headway against the overwhelmingly metropolitan values which education and the media express just as surely in the North as anywhere else" (p. 69). However, there has been a revival of interest in traditional values in the communities, including Aklavik in the last few years. This has led to a renewed interest in trapping, hunting and fishing as sports activities, and the ending of the academic year on May 31st in 1974 has aided this trend by allowing children to join their parents in the "bush" during the muskrat season. Moroever, in 1975 there has been discussion in the school about including two weeks out in the "bush" at the end of the school year for children to acquire some of the skills in trapping and hunting muskrats.

Higher returns from fur trapping in the last few years may encourage the trend back to traditional resource harvesting. Price rises between 1972-73 ranged from 8 per cent to 116 per cent for the six prime species (Gemini North, 1974). In addition, adverse social conditions, for example alcohol abuse in the settlement, may be an incentive for people to "get away from it all" in the "bush" for short periods.

Government incentives are necessary both in the form of greater encouragement to the Trappers' Association, and expansion of their role in game management. In addition provision of capital and equipment through loans, and encouragement of marketing through the Game Management Service would bring greater returns to trappers.

A large number of people in Aklavik depend upon hunting caribou for food, and the establishment of community freezers has aided this pursuit. The organization of community hunts has proven successful, but there remains the need for a road to the mountains to enable people to have greater ease of access to hunting areas. This would also facilitate the movement of gravel to the settlement which is greatly needed for construction purposes.

Commercial Fishery

A small commercial fishery might be a viable proposition in Aklavik, especially as the regional market expands. One hundred thousand pounds of domestic fish were caught in the 1973-74 year by Aklavik residents, and 4,000 pounds of Arctic char were taken by a small commercial operation in the Husky Channel for sale in Inuvik. Whitefish and inconnu are available locally, and greater quantities of Arctic char, trout and whitefish at a distance--at Fish River, and Shingle Point. With the increased use of "ski-doos" rather than dog-teams less fish is needed for feeding dogs, and efforts could be made to establish a commercial fishery. As the tourist industry increases in the area, and particularly as the population increases in Inuvik, markets are assured for local produce. Concentration on northern delicacies such as Arctic char might extend the market further south.

Consumer Cooperative Store

A consumer cooperative run by local native residents would seem to be a definite possibility. The experience with the Fur Garment Cooperative has been successful and has enabled local residents to operate a small business based on local resources, and it would seem that a cooperative store would be equally viable. This should concentrate on country food, including caribou, whale meat, muskrat and fish, but at the same time provide competition with the Hudson's Bay Company. At present local people sell caribou, whale meat and fish to one another, but if it were centrally organized this could operate more efficiently. Since the manager of Mackie's store is approaching retirement age, it would seem an ideal time for a new cooperative to be started. Funds are available through the Small Business Loan Fund, the Indian Economic Development Fund, the Eskimo Loan Fund, or the Industrial Development Bank. This cooperative would enable native people to join together to take advantage of shipping staple goods, other than meat and fish, from the South during the summer season. This, at present, is mainly done by temporary white residents, and by a few permanently employed residents of Aklavik.

Fur Garment Cooperative, and Handicraft Industry

Modest expansion in these two successfully operating industries in Aklavik would seem to be possible, especially as improved transportation will probably lead to an increase in tourists, and expansion of the oil and gas industry will bring more temporary workers to the Delta region who will most probably purchase local fur and handicraft items. The provision of the new community centre in 1974 offers space for a day care centre which would both provide employment and release female labour for participation in fur garment manufacture and handicraft work. Greater incentives should also be given for piece-work which would enable women to work from their own homes.

Tannery

In 1961 Black recommended that a tannery be established in the Mackenzie Delta to eliminate costs involved in sending furs outside the region to be tanned, and to provide employment and income for the native population. In 1965-66 a tannery was established in Aklavik, using the alum process, a simple and inexpensive process involving a maximum use of hand labour (Bissett, 1967). The project employed five men, but was abandoned in late 1966 due to lack of interest on the part of the employees, lack of space, and the need for an improved water supply (ibid.). However, with the proposals for an improved water supply it may be worth investigating the possibility of reinstating this project. Once the new senior citizens home is constructed, space will be available on the site of the old folks home which could be used for a tannery. If local native workers could be trained this might be a successful project which would also reduce the cost of shipping fur out to be tanned, and back to the fur garment cooperative to be made up.

Tourism

With the construction of two new hotels and a cafe in Aklavik in 1974, space is available for a modest expansion in tourism. This should concentrate on the activities which Aklavik has to offer, including hunting and fishing. Successfully operated hunting lodges have been introduced elsewhere in the Mackenzie Delta, for example at Tuktoyaktuk, and this would also provide another outlet for handicrafts and fur garments produced in the settlement. The hotels and cafe will also provide much needed employment in the settlement.

For any of these employment programs to work successfully, a greater gap must exist between welfare payments and wages for employment, so that there is some incentive to work. As Hunt (1974) points out the "ethic" of work has not received wide acceptance yet, and as Smith (1971) indicates, welfare is at present accepted as a legitimate source of income and is exploited accordingly.

In addition, active family planning programs are essential to offset the high fertility levels, and thus the high dependency ratio, and large welfare expenditures. Moreover, alcohol education and provision of attractive recreational alternatives are vital to reduce the high levels of alcohol abuse in the settlement.

TOWN PLAN, MUNICIPAL SERVICES AND INFRASTRUCTURE

As Heinke (1974) indicates: "Aklavik is still faced with the original problems that led to the decision to move the centre of government administration to Inuvik" (p. 11). However, many of these problems can be ameliorated by good town planning and various protection programs.

There is a great need for a new town plan and legal survey with clarification of ownership of land within the settlement. In addition, there needs to be an improvement in the layout and upkeep of the settlement buildings. Relocation of housing and services away from the river bank, erosion protection, and flood damage prevention schemes are all essential continuing requirements. There is still the possibility of flooding, although it has not occurred in the last five years, which has been attributed to diversion of the head waters to the Peace River system (Heinke, 1974, p. 11). The airstrip is to be upgraded in 1975, and the docking facilities also require improving. Additional housing needs to be built particularly for the younger residents approaching marriageable age, but also to replace the substandard and overcrowded homes. Replacement and repair of wooden sidewalks is essential since at present they have fallen into disrepair and are dangerous.

There is a need for new municipal government offices, which were planned for 1975, but have been cancelled due to lack of funds. Recreational facilities appear to be adequate with the construction of a new community hall in 1974, and the appointment of a recreational director to organize community activities.

Heinke does not recommend the use of utilidors for Aklavik due to the danger of flood damage. The cost for protection against flood damage would be prohibitive. The water supply needs to be upgraded, and plans to use Tower Lake rather than Pump Lake for the summer water supply system should be implemented as soon as possible.

Heinke recommends that sewage holding tanks should be provided in all households to accept toilet and waste wash water, and that adequate roads and driveways should be built to permit access by the pump-out truck. In addition indiscriminate dumping of "honey bags" should involve fines.

Garbage collection needs to be more frequent, particularly in summer, and the successful 1974 spring "clean-up" program involving rewards for the most garbage collected by children in the settlement should be continued in future years. The garbage dump should be cleaned up, and as Heinke suggests, when the road to the dump becomes impassable in the spring, a temporary one should be created, and when the road dries the garbage can be removed to the permanent dump.

If the road to the mountains is completed, gravel may be available more readily for the improvement of road conditions. In addition, an improved drainage system, with better maintained ditches and culverts, and the draining of low-lying areas would reduce the moisture content of the soil, and improve the nature of the ground surface. If further land is necessary for expansion some consideration should be given to the draining and subsequent infilling of muskeg areas to the northwest of the settlement.

COMMUNITY AUTONOMY

More effective government and industry "consultation" must be made with Aklavik residents, and residents of the other Delta settlements, particularly with respect to oil and gas developments in the area, which may have an effect on the traditional resource harvesting. In the last two years, in response to a plea for consultation with local residents, there have been a number of groups paying fleeting visits to communities, and sending a plethora f highly technical reports to the settlement councils. So much so, in fact, as The Drum (February 13, 1975) points out, that "one begins to hear the cry raised of 'enough, we've had enough of consultation'" (p. 2). Land use applications for the building of artificial islands, or the drilling of new well sites are numerous at council meetings during the summer months. However, little attention appears to be paid to Aklavik Hamlet Council's suggestions as to delaying land use applications until after the whaling season, or to other effects on the trapping and hunting activities. "Consultation" appears to them to merely mean informing people of pre-existing plans and suggesting ways in which they should adapt to them, as Usher has also indicated for Sachs Harbour residents, on Banks Island (1971). Instead, superficial consultation must be replaced by effective two-way communication, and not only inform residents in a straightforward manner of possible developments, but also take account of their opinions. This may be followed by "negotiation" on an equal basis between government, oil and gas companies, and the Aklavik residents themselves.

No one answer exists to solve the economic and social problems in Aklavik and a combination of several planning options may well be the best approach. A measure of out-migration in response to permanent employment possibilities is desirable, but at the same time employment must be made available within the settlement for those who wish to stay. The danger is that both the government and the Aklavik people themselves will become increasingly complacent, since at the present time, and in the foreseeable future, temporary employment is readily available outside the settlement. However, this situation cannot continue indefinitely and if the community is ever to become economically viable, definite plans must be implemented now to introduce new employment within the settlement itself. Only then will the undesirable social and economic consequences of high unemployment and reliance on welfare be reduced permanently, and not merely ameliorated temporarily by the availability of seasonal employment.

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APPENDIX A

INTERVIEW WITH PERMANENT MIGRANTS TO INUVIK FROM AKLAVIK

1. When did you live in Aklavik? ______________

2. In what year did you move to Inuvik? ______________

3. Did you live elsewhere prior to moving to Inuvik? Yes___ No ___
If so, where did you live?

4. Where were you born? ________________

5. Sex: Male_____ Female _____

6. Ethnic Origin: White___ Eskimo ___ Indian___ Metis ___

7. Address:

8. Marital Status: Single___ Married___ Common-law___
Widowed___ Separated___ Divorced___

9. Age___ Age of spouse___

10. Number of children_______
Sex
Male Female
Age:

11. Education: Where did you go to school? ______________
Grade Completed ______________
Vocational/Technical ______________
University ______________
On the job training ______________

12. What is your present occupation: Permanent ______________
Seasonal ______________

13. Why did you move to Inuvik? ______________
Employment/Economic___ Social/Family/Friends___
Retirement___ Health ___ Training (other than school) ___
School ___ Improved services/facilities ___
Other (Please specify)______________

APPENDIX A continued:

14. What was your occupation in Aklavik? Permanent ________________
Seasonal ________________

15. Did you have a job arranged before moving to Inuvik? Yes___ No ___

16. Did the government or an employer assist you to move: Yes___ No ___

17. Do you ever visit Aklavik now? Yes ___ No ___

18. If yes, how many visits did you make to Aklavik last year? ________

19. What were the reasons for these visits? ______________________
Employment/economic ____ Social/Family/Friends____ Health ___
Training ___ Improved services/facilities ___ Holiday ___
Other (please specify) ______________________________

20. How long did you spend in Aklavik? (If several visits were made to Aklavik last year, what was the longest visit? ______________

21. How did you travel to Aklavik from Inuvik? __________________

22. In which months did you visit Aklavik? ______________________

23. Do you visit Aklavik more in recent years than when you first moved to Inuvik? Considerably more ___ More ___ Same___ Less___ Considerably less ___ Why?______________________________

24. Are any of your family still living in Aklavik? Yes ___ No ___

25. If yes, which relations live in Aklavik?______________________

26. Do you intend to remain in Inuvik now? Yes ___ No ___

27. If YES, what attracts you to Inuvik? ________________________

28. If NO, why do you wish to leave? ___________________________

29. Where would you like to live if not in Inuvik? _______________

30. Are there any things in Aklavik which you like better than Inuvik?

31. Comparing Inuvik and Aklavik, what do you like and dislike about each?

	Likes	Dislikes
Aklavik		
Inuvik		

APPENDIX B

INTERVIEW WITH AKLAVIK RESIDENTS

1. Have you ever lived in Inuvik? Yes ___ No ___
2. Do you ever visit Inuvik? Yes ___ No ___
3. Sex: Male ___ Female ___
4. Address: ______________________________
5. Ethnic Origin: White ___ Eskimo ___ Indian ___ Metis ___
6. Marital Status: Single ___ Married ___ Common-law ___ Widowed ___
   Separated ___ Divorced ___
7. Age: ___ Age of Spouse: ___
8. Number of children __________ Sex
   Male Female
   Age:
9. Where were you born? ______________________________
   If not in Aklavik, when did you move here? (Year) ________
   Did you live elsewhere prior to moving to Aklavik? Yes ___ No ___
   If so, where did you live? ________________ From ________ to ________
   ________________ From ________ to ________
10. Education: Where did you go to school? ________________________
    Grade completed ________________
    Vocational/Technical ____________________
    University ____________________
    On the job training ____________________
11. What is your present occupation? Permanent ______________________
    Seasonal ______________________
12. What percentage of your food comes from hunting and/or trapping? _____

If answer to Questions 1 and 2 is NO, ask the following question, and then jump to question 29.

13. If you have never lived in Inuvik, nor visited it, is there any particular reason why not?

If answer to Question 1 is YES, (i.e. the interviewee has LIVED in Inuvik), continue with the following questions.

15. When did you live in Inuvik? ___

16. Why did you move to Inuvik? ___
Employment/Economic___ Social/Family/Friends___ Retirement___
Health___ Training___ (Other than school) School ___
Improved services/facilities___ Other (Please specify) ___

17. What was your occupation before moving to Inuvik? ___
Permanent ___ Seasonal ___

18. What was your occupation in Inuvik? ___
Permanent ___ Seasonal ___

19. Did you have a job arranged before moving to Inuvik? Yes___ No ___

20. Did the government or an employer assist you to move? Yes___ No ___

21. When did you move back to Aklavik? ___

22. Why did you move back to Aklavik? ___
Employment/Economic___ Social/Family/Friends ___ Retirement ___
Health ___ Training (Other than School) ___ School ___ Improved services/facilities ___ Other (Please specify) ___

If answer to Question 2 was YES, (i.e. the interviewee has VISITED Inuvik) continue here.

23. How many visits did you make to Inuvik last year? ___

24. What were the reasons for these visits? ___
Employment/Economic___ Social/Family/Friends ___ Health ___
Training___ Improved Services/Facilities ___ Holiday ___
Other (Please specify) ___

25. How long did you spend in Inuvik? (If several visits were made to Inuvik last year, what was the longest visit?) ___

26. How did you travel to Inuvik from Aklavik? ___

27. In which months did you visit Inuvik? ___

28. Do you visit Inuvik more in recent years than when it was first established? Considerably more ___ More ___ Same ___ Less___
Considerably Less ___ Why? ___

29. FOR ALL INTERVIEWEES, continue here:

Are any of your children living in Inuvik? Yes___ No ___

30. If yes, how many? ___ Sons ___ Daughters ___

31. If any of your children live in Inuvik, why did they move there? Employment/Economic ___ Social/Family/Friends ___ Retirement ___ Health ___ Training (Other than school) ___ School ___ Improved services/facilities ___ Other (Please specify) ______________

32. Do any of your children find seasonal employment in Inuvik? Yes ___ No ___

33. If any of your children live in Inuvik, please complete the following:

	Age on leaving Aklavik	Educational Grade attained in Aklavik	Occupation in Inuvik
Sons:			
Daughters:			

34. Are any of your children living elsewhere in Canada, or abroad? Yes ___ No ___ If so, where? ______________________

35. Approximately how many relatives do you have living in Inuvik? _____

36. Do you intend to remain in Aklavik now? Yes ___ No ___

37. If YES, what attracts you to Aklavik? ______________________

38. If NO, why do you wish to leave? ______________________

39. Where would you like to live if not in Aklavik? ______________

40. Are there any things in Inuvik which you would like to see in Aklavik? ______________________________

41. Comparing Aklavik and Inuvik, what do you like and dislike about each?

	LIKES	**DISLIKES**
Aklavik		
Dislikes		

APPENDIX C

LENGTH OF STAY IN INUVIK FOR AKLAVIK RETURN-MIGRANTS WHO LIVED IN INUVIK DURING THE CONSTRUCTION PHASE, 1955-61

Time	Number	Per Cent
Less than one year	10	22.2
1 - 2 years	14	31.2
2 - 3 years	8	17.8
4 - 10 years	7	15.5
10+ years	6	13.3
TOTAL MIGRANTS	45	100

APPENDIX D

INTENTIONS OF AKLAVIK AND INUVIK RESIDENTS TO STAY IN THEIR SETTLEMENTS

	Intention of permanent Inuvik migrants, 1955-61 to stay in Inuvik		Intention of Aklavik return-migrants to stay in Aklavik	
	Number	Per Cent	Number	Per Cent
YES	51	85.0	41	91.1
NO	5	8.3	2	4.4
DON'T KNOW	4	6.7	2	4.4
	60	100	45	100

APPENDIX E

MIGRANTS' LIKES AND DISLIKES OF AKLAVIK AND INUVIK*

	Permanent Migrants to Inuvik		Migrants to Inuvik During the Construction Phase Who Moved Back to Aklavik	
Likes of Aklavik	**Number**	**Per Cent**	**Number**	**Per Cent**
Home	0	0	10	11.90
Quieter	12	18.75	14	16.67
Friendlier	20	31.25	13	15.48
Setting	1	1.56	3	3.57
Smaller	10	15.63	4	4.76
Closer Knit	1	1.56	0	0
Good hunting, trapping, fish.	12	18.75	24	28.57
Site	1	1.56	0	0
Quaint	1	1.56	0	0
Peaceful	4	6.25	7	8.33
Family/friends	1	1.56	4	4.76
No Liquor Store	1	1.56	0	0
Particular Job	0	0	5	5.95
Dislikes Aklavik				
Poor Facilities	4	23.53	0	0
Mud	1	5.88	0	0
Dislike Trapping, etc.	1	5.88	0	0
Nothing to do	1	5.88	1	50.00
No Liquor Store	1	5.88	0	0
Shootings	1	5.88	0	0
No Doctor	1	5.88	0	0
No Jobs	5	29.41	0	0
Flooding	1	5.88	0	0
Too Small	1	5.88	0	0
Too Much Drinking	0	0	1	50.00

*More than one possible

APPENDIX E (continued)

	Permanent Migrants to Inuvik		Migrants to Inuvik During the Construction Phase Who Moved Back to Aklavik	
Likes Inuvik	Number	Per Cent	Number	Per Cent
Plenty of jobs	2	3.17	0	0
Better facilities	15	23.81	4	50.00
More business	3	4.76	0	0
More to do	4	6.35	2	25.00
Home	11	17.46	0	0
Family/Friends	4	6.35	0	0
Educational Facilities	3	4.76	1	12.50
Recreational Facilities	1	1.59	0	0
Municipal Facilities	2	3.17	0	0
Liquor Store	1	1.59	1	12.50
Job Security	16	25.40	0	0
Where else to go?	1	1.59	0	0
Dislikes Inuvik				
Too big	10	34.48	20	41.67
Inferior Roads	1	3.45	0	0
Too many people	1	3.45	0	0
Too much drinking	8	27.59	12	25.00
Unfriendly	2	6.90	11	22.92
Transience	1	3.45	0	0
Dirty	3	10.34	0	0
Expensive	2	6.90	1	2.08
Where else to go?	1	3.45	0	0
Noisy	0	0	2	4.17
Too far from hunting, etc.	0	0	2	4.17

APPENDIX F

OOCUPATIONS IN INUVIK OF AKLAVIK RETURN-MIGRANTS

Occupational Group	Migrants Who Moved to Inuvik and Back to Aklavik 1955-61		Migrants Who Moved to Inuvik 1955-61 and back 1962-74		Migrants Who Moved to Inuvik 1962-74 and back 1962-74		Total Return-Migrants	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Managerial	0	0	0	0	1	7.1	1	1.7
Professional/ Technical	0	0	0	0	0	0	0	0
Clerical	0	0	0	0	1	7.1	1	1.7
Sales	0	0	0	0	0	0	0	0
Service/Recreation	6	19.3	2	14.3	2	14.3	10	16.9
Transportation	0	0	0	0	2	14.3	2	3.4
Fishermen/Hunters/ Trappers	0	0	0	0	1	7.1	1	1.7
Crafts	2	6.5	2	14.3	2	14.3	6	10.2
Labourers	22	71.0	8*	57.1	5	35.8	35	59.3
School	1	3.2	2	14.3	0	0	3	5.1
TOTAL	31	100	14	100	14	100	59	100

*Includes 2 at school whose parents moved to work on construction, and 3 unemployed whose spouse worked on construction.

APPENDIX G

OCCUPATIONS PRIOR TO THE MOVE, IN INUVIK AND IN AKLAVIK OF RETURN-MIGRANTS 1962-74

Occupational Group	Occupation Prior to Move		Occupation in Inuvik		Occupation in 1974	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Managerial	1	7.1	1	7.1	2	14.3
Professional/Technical	0	0	0	0	1	7.1
Clerical	0	0	1	7.1	1	7.1
Sales	0	0	0	0	0	0
Service/Recreation	0	0	2	14.3	0	0
Transportation	1	7.1	2	14.3	0	0
Fishermen/Hunters, etc.	7	50.1	0	0	4	28.6
Crafts	0	0	2	14.3	0	0
Labourers	1	7.1	5	35.8	0	0
SUB-TOTAL	10	71.4	13	92.9	8	57.1
Unemployed	2	14.3	0	0	1	7.1
School	2	14.3	1	7.1	0	0
Housewives	0	0	0	0	5	35.8
TOTAL	14	100	14	100	14	100

APPENDIX H

OCCUPATIONS PRIOR TO MOVE AND OCCUPATIONS IN INUVIK OF INUVIK PERMANENT MIGRANTS (1962-74)

Occupational Group	Occupation in Aklavik prior to move		Permanent Occupation in Inuvik	
	Number	Per Cent	Number	Per Cent
Managerial	1	2.8	2	5.6
Professional/Technical	1	2.8	6	16.6
Clerical	1	2.8	1	2.8
Sales	0	0	0	0
Service/Recreation	8	22.3	6	16.6
Transportation	0	0	3	8.3
Fishermen/Hunters, etc.	10	27.7	0	0
Craftsmen	3	8.3	4	11.2
Labourers	0	0	2	5.6
Farmers/Loggers, etc.	0	0	1	2.8
SUB-TOTAL	24	66.7	25	69.5
School	9	25.0	0	0
Unemployed	3	8.3	2	5.6
Senior Citizens	0	0	2	5.6
Housewives	0	0	7	19.3
TOTAL	36	100	36	100

APPENDIX I

MIGRANTS' REASONS FOR MOVING (1962-74)

Reasons for Moving	Permanent Inuvik Migrants		Return-Migrants to Aklavik	
	Number	Per Cent	Number	Per Cent
Construction	3	8.1	2	12.6
Job transfer	8	21.6	1	6.2
More jobs	8	21.6	10	62.6
Business	0	0	1	6.2
Parents moved for employment	3	8.1	0	0
More opportunities	0	0	1	6.2
School	2	5.4	1	6.2
Reindeer Station closed	3	8.1	0	0
Health	6	16.2	0	0
Family/Friends	1	2.8	0	0
Personal	3	8.1	0	0

APPENDIX J

REASONS FOR MOVING BACK TO AKLAVIK: RETURN-MIGRANTS, 1962-74

Reason	Number	Per Cent
To be with family/friends	9	36
Business	2	8
Personal	2	8
Food easier to obtain	5	20
Hated Inuvik	2	8
Too expensive	1	4
Too much drinking in Inuvik	3	12
Job ended	1	4
	25	100

APPENDIX K

LIKES ABOUT INUVIK (1962-74 Migrants)

	Permanent Inuvik Migrants	Aklavik Return-Migrants 1962-74
Plenty of jobs	2	No responses
Better facilities	13	
More business	1	
More to do	2	
Home	5	
Family/Friends	3	
Particular job security	15	
Right size of settlement	1	

APPENDIX L

LIKES ABOUT AKLAVIK (1962-74 Migrants)

	Permanent Inuvik Migrants		Aklavik Return-Migrants	
	Number	%	Number	%
Home	2	4.2	1	3.8
Quieter	6	12.5	2	7.6
Friendlier	13	27.0	8	30.7
Setting	2	4.2	1	3.8
Smaller	7	14.6	4	15.3
Good Hunting, etc.	9	18.6	9	34.6
Family/	4	8.3	1	3.8
Closer Knit	1	2.1	0	0
Peaceful	2	4.2	0	0
Relaxed	1	2.1	0	0
No Liquor Store	1	2.1	0	0